



SEQUENCE LISTING

<110> Gerlach, Valerie L
MacDougall, John R
Smithson, Glennda

<120> Novel Polypeptides and Nucleic Acids Encoding Same

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<140> 09/898,586
<141> 2001-07-03

<150> 60/177,839
<151> 2000-01-25

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<151> 2000-01-14

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<151> 2001-01-16

<160> 104

<170> PatentIn Ver. 2.1

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<212> DNA
<213> Homo sapiens

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<211> 337

<212> PRT

<213> Homo sapiens

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Phe Ser Ser Trp Gln Gln Gln Val Leu Leu Phe Ala Leu Phe Leu

20 25 30

Cys Leu Tyr Leu Thr Gly Leu Phe Gly Asn Leu Leu Ile Leu Leu Ala

35 40 45

Ile Gly Ser Asp His Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ala

50 55 60

Asn Leu Ser Leu Val Asp Leu Cys Leu Pro Ser Ala Thr Val Pro Lys

65 70 75 80

Met Leu Leu Asn Ile Gln Thr Gln Thr Gln Thr Ile Ser Tyr Pro Gly

85 90 95

Cys Leu Ala Gln Met Tyr Phe Cys Met Met Phe Ala Asn Met Asp Asn

100 105 110

Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
115 120 125

Pro Leu His Tyr Ser Thr Ile Met Ala Leu Arg Leu Cys Ala Ser Leu
130 135 140

Val Ala Ala Pro Trp Val Ile Ala Ile Leu Asn Pro Leu Leu His Thr
145 150 155 160

Leu Met Met Ala His Leu His Phe Cys Ser Asp Asn Val Ile His His
165 170 175

Phe Phe Cys Asp Ile Asn Ser Leu Leu Pro Leu Ser Cys Ser Asp Thr
180 185 190

Ser Leu Asn Gln Leu Ser Val Leu Ala Thr Val Gly Leu Ile Phe Val
195 200 205

Val Pro Ser Val Cys Ile Leu Val Ser Tyr Ile Leu Ile Val Ser Ala
210 215 220

Val Met Lys Val Pro Ser Ala Gln Gly Lys Leu Lys Ala Phe Ser Thr
225 230 235 240

Cys Gly Ser His Leu Ala Leu Val Ile Leu Phe Tyr Gly Ala Ile Thr
245 250 255

Gly Val Tyr Met Ser Pro Leu Ser Asn His Ser Thr Glu Lys Asp Ser
260 265 270

Ala Ala Ser Val Ile Phe Met Val Val Ala Pro Val Leu Asn Pro Phe
275 280 285

Ile Tyr Ser Leu Arg Asn Asn Glu Leu Lys Gly Thr Leu Lys Lys Thr
290 295 300

Leu Ser Arg Pro Gly Ala Val Ala His Ala Cys Asn Pro Ser Thr Leu
305 310 315 320

Gly Gly Arg Gly Gly Trp Ile Met Arg Ser Gly Asp Arg Asp His Pro
325 330 335

Gly

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<212> DNA

<213> Homo sapiens

<400> 3

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<211> 310

<212> PRT

<213> Homo sapiens

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Pro Val Gly Pro Arg Ile Gln Met Leu Leu Phe Gly Leu Phe Ser Leu
20 25 30

Phe Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr Ile Leu Gly Leu Ile
35 40 45

Ser Leu Asp Ser Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His
50 55 60

Leu Ala Val Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met
65 70 75 80

Leu Val Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg
85 90 95

Met Met Gln Thr Phe Leu Phe Ser Thr Phe Ala Val Thr Glu Cys Leu
100 105 110

Leu Leu Val Val Met Ser Tyr Asp Leu Tyr Val Ala Ile Cys His Pro
115 120 125

Leu Arg Tyr Leu Ala Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala
130 135 140

Val Thr Ser Trp Thr Thr Gly Val Leu Leu Ser Leu Ile His Leu Val
145 150 155 160

Leu Leu Leu Pro Leu Pro Phe Cys Arg Pro Gln Lys Ile Tyr His Phe
165 170 175

Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr His
180 185 190

Ile Asn Glu Asn Met Val Leu Ala Gly Ala Ile Ser Gly Leu Val Gly
195 200 205

Pro Leu Ser Thr Ile Val Val Ser Tyr Met Cys Ile Leu Cys Ala Ile
210 215 220

Leu Gln Ile Gln Ser Arg Glu Val Gln Arg Lys Ala Phe Arg Thr Cys
225 230 235 240

Phe Ser His Leu Cys Val Ile Gly Leu Val Tyr Gly Thr Ala Ile Ile
245 250 255

Met Tyr Val Gly Pro Arg Tyr Gly Asn Pro Lys Glu Gln Lys Lys Tyr
260 265 270

Leu Leu Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
275 280 285

Cys Ser Leu Arg Asn Ser Glu Val Lys Asn Thr Leu Lys Arg Val Leu
290 295 300

Gly Val Glu Arg Ala Leu
305 310

<210> 5

<211> 1090

<212> DNA

<213> Homo sapiens

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<211> 314

<212> PRT

<213> Homo sapiens

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Gly Phe Ser Ser Leu Gly Glu Leu Gln Leu Leu Leu Phe Val Ile Phe
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Leu Leu Leu Tyr Leu Thr Ile Leu Val Ala Asn Val Thr Ile Met Ala
35 40 45

Val Ile Arg Phe Ser Trp Thr Leu His Thr Pro Met Tyr Gly Phe Leu
50 55 60

Phe Ile Leu Ser Phe Ser Glu Ser Cys Tyr Thr Phe Val Ile Ile Pro
65 70 75 80

Gln Leu Leu Val His Leu Leu Ser Asp Thr Lys Thr Ile Ser Phe Met
85 90 95

Ala Cys Ala Thr Gln Leu Phe Phe Leu Gly Phe Ala Cys Thr Asn

100 105 110

Cys Leu Leu Ile Ala Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys
115 120 125

His Pro Leu Arg Tyr Thr Leu Ile Ile Asn Lys Arg Leu Gly Leu Glu
130 135 140

Leu Ile Ser Leu Ser Gly Ala Thr Gly Phe Phe Ile Ala Leu Val Ala
145 150 155 160

Thr Asn Leu Ile Cys Asp Met Arg Phe Cys Gly Pro Asn Arg Val Asn
165 170 175

His Tyr Phe Cys Asp Met Ala Pro Val Ile Lys Leu Ala Cys Thr Asp
180 185 190

Thr His Val Lys Glu Leu Ala Leu Phe Ser Leu Ser Ile Leu Val Ile
195 200 205

Met Val Pro Phe Leu Leu Ile Leu Ile Ser Tyr Gly Phe Ile Val Asn
210 215 220

Thr Ile Leu Lys Ile Pro Ser Ala Glu Gly Lys Lys Ala Phe Val Thr
225 230 235 240

Cys Ala Ser His Leu Thr Val Val Phe Val His Tyr Gly Cys Ala Ser
245 250 255

Ile Ile Tyr Leu Arg Pro Lys Ser Lys Ser Ala Ser Asp Lys Asp Gln
260 265 270

Leu Val Ala Val Thr Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Leu
275 280 285

Val Tyr Ser Leu Arg Asn Lys Glu Val Lys Thr Ala Leu Lys Arg Val
290 295 300

Leu Gly Met Pro Val Ala Thr Lys Met Ser
305 310

<210> 7

<211> 1090

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Gly Phe Ser Ser Leu Gly Glu Leu Gln Leu Leu Leu Phe Val Ile Phe
 20 25 30

Leu Leu Leu Tyr Leu Thr Ile Leu Val Ala Asn Val Thr Ile Met Ala
 35 40 45

Val Ile Arg Phe Ser Trp Thr Leu His Thr Pro Met Tyr Gly Phe Leu
 50 55 60

Phe Ile Leu Ser Phe Ser Glu Ser Cys Tyr Thr Phe Val Ile Ile Pro
 65 70 75 80

Gln Leu Leu Val His Leu Leu Ser Asp Thr Lys Thr Ile Ser Leu Met
 85 90 95

Ala Cys Ala Thr Gln Leu Phe Phe Leu Gly Phe Ala Cys Thr Asn
 100 105 110

Cys Leu Leu Ile Ala Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys
115 120 125

His Pro Leu Arg Tyr Thr Leu Ile Ile Asn Lys Arg Leu Gly Leu Glu
130 135 140

Leu Ile Ser Leu Ser Gly Ala Thr Gly Phe Phe Ile Ala Leu Val Ala
145 150 155 160

Thr Asn Leu Ile Cys Asp Met Arg Phe Cys Gly Pro Asn Arg Val Asn
165 170 175

His Tyr Phe Cys Asp Met Ala Pro Val Ile Lys Leu Ala Cys Thr Asp
180 185 190

Thr His Val Lys Glu Leu Ala Leu Phe Ser Leu Ser Ile Leu Val Ile
195 200 205

Met Val Pro Phe Leu Leu Ile Leu Ile Ser Tyr Gly Phe Ile Val Asn
210 215 220

Thr Ile Leu Lys Ile Pro Ser Ala Glu Gly Lys Lys Ala Phe Val Thr
225 230 235 240

Cys Ala Ser His Leu Thr Val Val Phe Val His Tyr Asp Cys Ala Ser
245 250 255

Ile Ile Tyr Leu Arg Pro Lys Ser Lys Ser Ala Ser Asp Lys Asp Gln
260 265 270

Leu Val Ala Val Thr Tyr Ala Val Val Thr Pro Leu Leu Asn Pro Leu
275 280 285

Val Tyr Ser Leu Arg Asn Lys Glu Val Lys Thr Ala Leu Lys Arg Val
290 295 300

Leu Gly Met Pro Val Ala Thr Lys Met Ser
305 310

<210> 9

<211> 822

<212> DNA

<213> Homo sapiens

<400> 9

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<211> 265

<212> PRT

<213> Homo sapiens

<400> 10

Pro Met Cys Phe Phe Leu Ser Lys Leu Cys Ser Ala Asp Ile Gly Phe
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Thr Leu Ala Met Val Pro Lys Met Ile Val Asn Met Gln Ser His Ser
20 25 30

Arg Val Ile Ser Tyr Glu Gly Cys Leu Thr Arg Met Ser Phe Phe Val
35 40 45

Leu Phe Ala Cys Met Glu Asp Met Leu Leu Thr Val Met Ala Tyr Asp
50 55 60

Cys Phe Val Ala Ile Cys Arg Pro Leu His Tyr Pro Val Ile Val Asn
65 70 75 80

Pro His Leu Cys Val Phe Phe Val Leu Val Ser Phe Phe Leu Ser Pro
85 90 95

Leu Asp Ser Gln Leu His Ser Trp Ile Val Leu Leu Phe Thr Ile Ile
100 105 110

Lys Asn Val Glu Ile Thr Asn Phe Val Cys Glu Pro Ser Gln Leu Leu
115 120 125

Asn Leu Ala Cys Ser Asp Ser Val Ile Asn Asn Ile Phe Ile Tyr Phe
130 135 140

Asp Ser Thr Met Phe Gly Phe Leu Pro Ile Ser Gly Ile Leu Leu Ser

145	150	155	160
Tyr Tyr Lys Ile Val Pro Ser Ile Leu Arg Met Ser Ser Ser Asp Gly			
165	170	175	
Lys Tyr Lys Gly Phe Ser Thr Cys Gly Ser Tyr Leu Ala Val Val Cys			
180	185	190	
Ser Phe Asp Gly Thr Gly Ile Gly Met Tyr Leu Thr Ser Ala Val Ser			
195	200	205	
Pro Pro Pro Arg Asn Gly Val Val Ala Ser Val Met Tyr Ala Val Val			
210	215	220	
Thr Pro Met Leu Asn Leu Phe Ile Tyr Ser Leu Gly Lys Arg Asp Ile			
225	230	235	240
Gln Ser Val Leu Arg Arg Leu Cys Ser Arg Thr Val Glu Ser His Asp			
245	250	255	
Met Phe His Pro Phe Ser Cys Val Gly			
260	265		

<210> 11
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 <212> DNA
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<210> 12
<211> 294
<212> PRT
<213> Homo sapiens

<400> 12

Met Tyr Met Val Thr Val Leu Arg Asn Leu Leu Ser Ile Leu Ala Val
1 5 10 15

Ser Ser Asp Ser Pro Leu His Thr Pro Met Cys Phe Phe Leu Ser Lys
20 25 30

Leu Cys Ser Ala Asp Ile Gly Phe Thr Leu Ala Met Val Pro Lys Met
35 40 45

Ile Val Asn Met Gln Ser His Ser Arg Val Ile Ser Tyr Glu Gly Cys
50 55 60

Leu Thr Arg Met Ser Phe Phe Val Leu Phe Ala Cys Met Glu Asp Met
65 70 75 80

Leu Leu Thr Val Met Ala Tyr Asp Cys Phe Val Ala Ile Cys Arg Pro
85 90 95

Leu His Tyr Pro Val Ile Val Asn Pro His Leu Cys Val Phe Phe Val
100 105 110

Leu Val Ser Phe Phe Leu Ser Pro Leu Asp Ser Gln Leu His Ser Trp
115 120 125

Ile Val Leu Leu Phe Thr Ile Ile Lys Asn Val Glu Ile Thr Asn Phe
130 135 140

Val Cys Glu Pro Ser Gln Leu Leu Asn Leu Ala Cys Ser Asp Ser Val
145 150 155 160

Ile Asn Asn Ile Phe Ile Tyr Phe Asp Ser Thr Met Phe Gly Phe Leu
165 170 175

Pro Ile Ser Gly Ile Leu Leu Ser Tyr Tyr Lys Ile Val Pro Ser Ile
180 185 190

Leu Arg Met Ser Ser Ser Asp Gly Lys Tyr Lys Gly Phe Ser Thr Cys
195 200 205

Gly Ser Tyr Leu Ala Val Val Cys Ser Phe Asp Gly Thr Gly Ile Gly
210 215 220

Met Tyr Leu Thr Ser Ala Val Ser Pro Pro Pro Arg Asn Gly Val Ala
225 230 235 240

Ser Val Met Tyr Ala Val Val Thr Pro Met Leu Asn Leu Phe Ile Leu
245 250 255

Ser Leu Gly Lys Arg Asp Ile Gln Ser Val Leu Arg Arg Leu Cys Ser
260 265 270

Arg Thr Val Glu Ser His Asp Met Phe His Pro Phe Ser Cys Val Gly
275 280 285

Glu Lys Gly Gln Pro His
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<210> 13

<211> 930

<212> DNA

<213> Homo sapiens

<400> 13

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<210> 14

<211> 309

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> (280)

<223> Wherein Xaa is any amino acid.

<400> 14

Thr	Glu	Pro	Arg	Asn	Leu	Thr	Gly	Val	Ser	Glu	Phe	Leu	Leu	Gly
1		5				10				15				
Leu Ser Glu Asp Pro Glu Leu Gln Pro Val Leu Ala Leu Leu Ser Leu														
	20			25					30					
Ser Leu Ser Met Tyr Leu Val Thr Val Leu Arg Asn Leu Leu Ser Ile														
	35			40				45						
Pro Ala Val Ser Ser Asp Ser His Leu His Thr Pro Thr Tyr Phe Phe														
	50			55			60							
Leu Ser Ile Leu Cys Trp Ala Asp Ile Gly Phe Thr Ser Ala Thr Val														
	65			70			75		80					
Pro Lys Met Ile Val Asp Met Gln Trp Tyr Ser Arg Val Ile Ser His														
	85			90			95							
Ala Gly Cys Leu Thr Gln Met Ser Phe Leu Val Leu Phe Ala Cys Ile														
	100			105			110							
Glu Gly Met Leu Leu Thr Val Met Ala Tyr Asp Cys Phe Val Gly Ile														
	115			120			125							
Tyr Arg Pro Leu His Tyr Pro Val Ile Val Asn Pro His Leu Cys Val														
	130			135			140							
Phe Phe Val Leu Val Ser Phe Phe Leu Ser Leu Leu Asp Ser Gln Leu														
	145			150			155		160					
His Ser Trp Ile Val Leu Gln Phe Thr Ile Ile Lys Asn Val Glu Ile														
	165			170			175							
Ser Asn Phe Val Cys Asp Pro Ser Gln Leu Leu Lys Leu Ala Ser Tyr														
	180			185			190							
Asp Ser Val Ile Asn Ser Ile Phe Ile Tyr Phe Asp Ser Thr Met Phe														
	195			200			205							
Gly Phe Leu Pro Ile Ser Gly Ile Leu Ser Ser Tyr Tyr Lys Ile Val														
	210			215			220							
Pro Ser Ile Leu Arg Met Ser Ser Asp Gly Lys Tyr Lys Thr Phe														
	225			230			235		240					

Ser Thr Tyr Gly Ser His Leu Ala Phe Val Cys Ser Phe Tyr Gly Thr
245 250 255

Gly Ile Asp Met Tyr Leu Ala Ser Ala Met Ser Pro Thr Pro Arg Asn
260 265 270

Gly Val Val Val Ser Val Met Xaa Ala Val Val Thr Pro Met Leu Asn
275 280 285

Leu Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Gln Ser Ala Leu Arg
290 295 300

Arg Leu Arg Ser Arg
305

<210> 15

<211> 994

<212> DNA

<213> Homo sapiens

<400> 15

tgcagctaaa gtgcattgtg taaaacatgg gggatgtgaa tcagtcggtg gcctcagact 60
tcattctggt gggcctcttc agtcactcag gatcacgcca gctcctcttc tccctggtgg 120
ctgtcatgtt tgtcataggc cttctggca acaccgttct tcttttttg atccgtgtgg 180
actcccgct ccatacaccc atgtacttcc tgctcagcca gctctccctg tttgacattg 240
gctgtcccat ggtcaccatc cccaagatgg catcagactt tctgcgggg 300
cctccatgg aggtggtgca gctcaaataat tcttcctcac actgatgggt gtggctgagg 360
gcttcctgtt ggtcctcatg tcttatgacc gttatgttgc tgtgtgccag cccctgcagt 420
atccctgtact tatgagacgc caggtatgtc tgctgatgat gggctcctcc tgggtggtag 480
gtgtgctcaa cgcctccatc cagaccccca tcaccctgca tttccctac tgtgcctccc 540
gtattgtgga tcacttcttc tgtgaggtgc cagccctact gaagctctcc tgtgcagata 600
cctgtgccta cggatggcg ctgtccacct caggggtgt gatccataatg ctccctctt 660
ccctcatcgc cacccctcac ggccacgtgt tgccaggctgt tctaagcatg cgctcagagg 720
aggccagaca caaggctgtc accacctgtt cctcgccat cacggtagtg gggcttttt 780
atggtgccgc cgtgttcatg tacatggtgc ctgcgccta ccacagtcca cagcaggata 840
acgtggtttc ccttttat agccttgtca cccctacact caacccctt atctacagtc 900
tgaggaatcc ggaggtgtgg atggcttgg tcaaagtgtc tagcagagct ggactcaggc 960
aatgtgctg actacataga aactgctggt gaga 994

<210> 16

<211> 314

<212> PRT

<213> Homo sapiens

<400> 16

Met Gly Asp Val Asn Gln Ser Val Ala Ser Asp Phe Ile Leu Val Gly

1 5 10 15

Leu Phe Ser His Ser Gly Ser Arg Gln Leu Leu Phe Ser Leu Val Ala
20 25 30

Val Met Phe Val Ile Gly Leu Leu Gly Asn Thr Val Leu Leu Phe Leu
35 40 45

Ile Arg Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser
50 55 60

Gln Leu Ser Leu Phe Asp Ile Gly Cys Pro Met Val Thr Ile Pro Lys
65 70 75 80

Met Ala Ser Asp Phe Leu Arg Gly Glu Gly Ala Thr Ser Tyr Gly Gly
85 90 95

Gly Ala Ala Gln Ile Phe Phe Leu Thr Leu Met Gly Val Ala Glu Gly
100 105 110

Val Leu Leu Val Leu Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Gln
115 120 125

Pro Leu Gln Tyr Pro Val Leu Met Arg Arg Gln Val Cys Leu Leu Met
130 135 140

Met Gly Ser Ser Trp Val Val Gly Val Leu Asn Ala Ser Ile Gln Thr
145 150 155 160

Ser Ile Thr Leu His Phe Pro Tyr Cys Ala Ser Arg Ile Val Asp His
165 170 175

Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Ala Asp Thr
180 185 190

Cys Ala Tyr Glu Met Ala Leu Ser Thr Ser Gly Val Leu Ile Leu Met
195 200 205

Leu Pro Leu Ser Leu Ile Ala Thr Ser Tyr Gly His Val Leu Gln Ala
210 215 220

Val Leu Ser Met Arg Ser Glu Glu Ala Arg His Lys Ala Val Thr Thr
225 230 235 240

Cys Ser Ser His Ile Thr Val Val Gly Leu Phe Tyr Gly Ala Ala Val
245 250 255

Phe Met Tyr Met Val Pro Cys Ala Tyr His Ser Pro Gln Gln Asp Asn

260

265

270

Val Val Ser Leu Phe Tyr Ser Leu Val Thr Pro Thr Leu Asn Pro Leu
275 280 285

Ile Tyr Ser Leu Arg Asn Pro Glu Val Trp Met Ala Leu Val Lys Val
290 295 300

Leu Ser Arg Ala Gly Leu Arg Gln Met Cys
305 310

<210> 17

<211> 996

<212> DNA

<213> Homo sapiens

<400> 17

tgcagctaaa gtgcattgtg taaaactatg ggggatgtga atcagtcgg ggcctcagac 60
ttcattctgg tgggcctctt cagtcactca ggatcacgccc agtcctctt ctccctgg 120
gctgtcatgt ttgtcatagg cttctggc aacaccgttc ttctttttt gatccgtgtg 180
gactccggc tccacacacc catgtacttc ctgttcagcc agtcctccct gtttgcatt 240
ggctgtccca tggtcaccat ccccaagatg gcatcagact ttctgcggg agaagggtgcc 300
acctccatg gaggtggtgc agctcaaata ttcttcctca cactgtggg tgtggctgag 360
ggcgtcctgt tggtcctcat gtcttatgac cgttatgtt ctgtgtgcca gcccctgcag 420
tatcctgtac ttatgagacg ccaggtatgt ctgctgatga tggctcctc ctgggtggta 480
ggtgtgtca acgcctccat ccagacctcc atcaccctgc atttcccta ctgtgcctcc 540
cgtattgtgg atcacttctt ctgtgaggtg ccagccctac tgaagctctc ctgtgcagat 600
acctgtgcct acgagatggc gctgtccacc tcaggggtgc tgatccta at gtcctctt 660
tccctcatcg ccacccctca cggccacgtg ttgcaggctg ttctaagcat ggcgtcagag 720
gaggccagac acaaggctgt caccacctgc tcctcgacaca tcacggtagt gggctcttt 780
tatggtgccg ccgtgttcat gtacatggtgc cttgcgcctt accacagtcc acagcaggat 840
aacgtggttt ccctcttcta tagccttgtc acccctacac tcaacccctt tatctacagt 900
ctgaggaatc cggaggtgtg gatggcttg gtcaaagtgc ttagcagagc tggactcagg 960
caaatgtgca tgactacata gaaactgctg gtgaga 996

<210> 18

<211> 317

<212> PRT

<213> Homo sapiens

<400> 18

Met Gly Asp Val Asn Gln Ser Val Ala Ser Asp Phe Ile Leu Val Gly
1 5 10 15

Leu Phe Ser His Ser Gly Ser Arg Gln Leu Leu Phe Ser Leu Val Ala
20 25 30

Val Met Phe Val Ile Gly Leu Leu Gly Asn Thr Val Leu Leu Phe Leu
35 40 45

Ile Arg Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser
50 55 60

Gln Leu Ser Leu Phe Asp Ile Gly Cys Pro Met Val Thr Ile Pro Lys
65 70 75 80

Met Ala Ser Asp Phe Leu Arg Gly Glu Gly Ala Thr Ser Tyr Gly Gly
85 90 95

Gly Ala Ala Gln Ile Phe Phe Leu Thr Leu Met Gly Val Ala Glu Gly
100 105 110

Val Leu Leu Val Leu Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Gln
115 120 125

Pro Leu Gln Tyr Pro Val Leu Met Arg Arg Gln Val Cys Leu Leu Met
130 135 140

Met Gly Ser Ser Trp Val Val Gly Val Leu Asn Ala Ser Ile Gln Thr
145 150 155 160

Ser Ile Thr Leu His Phe Pro Tyr Cys Ala Ser Arg Ile Val Asp His
165 170 175

Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Ala Asp Thr
180 185 190

Cys Ala Tyr Glu Met Ala Leu Ser Thr Ser Gly Val Leu Ile Leu Met
195 200 205

Leu Pro Leu Ser Leu Ile Ala Thr Ser Tyr Gly His Val Leu Gln Ala
210 215 220

Val Leu Ser Met Arg Ser Glu Glu Ala Arg His Lys Ala Val Thr Thr
225 230 235 240

Cys Ser Ser His Ile Thr Val Val Gly Leu Phe Tyr Gly Ala Ala Val
245 250 255

Phe Met Tyr Met Val Pro Cys Ala Tyr His Ser Pro Gln Gln Asp Asn
260 265 270

Val Val Ser Leu Phe Tyr Ser Leu Val Thr Pro Thr Leu Asn Pro Leu
275 280 285

Ile Tyr Ser Leu Arg Asn Pro Glu Val Val Trp Met Ala Leu Val Lys Val
290 295 300

Leu Ser Arg Ala Gly Leu Arg Gln Met Cys Met Thr Thr
305 310 315

<210> 19
<211> 1077
<212> DNA
<213> Homo sapiens

<400> 19
caggttcatt gacaaggta taccaaccag atgaatccag caaatcattc ccaggtggca 60
ggatttggc tactggggct ctctcagggt tggagcttc ggtttggttt cttcactgtt 120
ttctctgctg tggatattat gactgttagt ggaaacccctc ttattgtggt catagtgacc 180
tccgaccac acctgcacac aaccatgtat tttcttttgg gcaatcttc tttcctggac 240
ttttgctact cttccatcac agcacctagg atgctgggtg acttgctctc aggcaaccct 300
accatttctt ttgggtggatg cctgactcaa ctcttcttcc tccacttcat tggaggcata 360
aagatcttcc tgctgactgt catggcgat gaccgctaca ttgccatttc ccagccccctg 420
caactacacgc tcattatgaa tcagactgtc tggacttcc ttatggcagc ctcctgggtg 480
gggggcttca tccactccat agtacagatt gcattgacta tccagctgccc attctgtggg 540
cctgacaaggc tggacaactt ttattgtgat gtgcctcagc tgatcaaatt ggcctgcaca 600
gataccttttgc tcttagagct ttaatgggtg tctaaacaatg gcctgggtgac cctgatgtgt 660
tttctgggtgc ttctgggatc gtacacagca ctgcttagtca tgctccgaag ccactcacgg 720
gagggccgca gcaaggccct gtctacctgt gcctctcaca ttgctgtggt gacctaatac 780
tttgtgcctt gcatctacgt ctatacaagg cttttcgaa cattccccat ggacaaggcc 840
gtctctgtgc tatacacaat tggcacccccc atgctgaatc ctgccatcta taccctgaga 900
aacaaggaag tgatcatggc catgaagaag ctgtggagga ggaaaaagga ccctattgg 960
cccctggagc acagaccctt acattagcag aggcagtgac ctgagaatct gaaagatgct 1020
acagggtatt agcagaggca gtgacctgag aatctgaaag atgctacagg gtattag 1077

<210> 20
<211> 318
<212> PRT
<213> Homo sapiens

<400> 20
Met Asn Pro Ala Asn His Ser Gln Val Ala Gly Phe Val Leu Leu Gly
1 5 10 15

Leu Ser Gln Val Trp Glu Leu Arg Phe Val Phe Phe Thr Val Phe Ser
20 25 30

Ala Val Tyr Phe Met Thr Val Val Gly Asn Leu Leu Ile Val Val Ile
35 40 45

Val Thr Ser Asp Pro His Leu His Thr Thr Met Tyr Phe Leu Leu Gly
50 55 60

Asn Leu Ser Phe Leu Asp Phe Cys Tyr Ser Ser Ile Thr Ala Pro Arg
65 70 75 80

Met Leu Val Asp Leu Leu Ser Gly Asn Pro Thr Ile Ser Phe Gly Gly
85 90 95

Cys Leu Thr Gln Leu Phe Phe His Phe Ile Gly Gly Ile Lys Ile
100 105 110

Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Ser Gln
115 120 125

Pro Leu His Tyr Thr Leu Ile Met Asn Gln Thr Val Cys Ala Leu Leu
130 135 140

Met Ala Ala Ser Trp Val Gly Gly Phe Ile His Ser Ile Val Gln Ile
145 150 155 160

Ala Leu Thr Ile Gln Leu Pro Phe Cys Gly Pro Asp Lys Leu Asp Asn
165 170 175

Phe Tyr Cys Asp Val Pro Gln Leu Ile Lys Leu Ala Cys Thr Asp Thr
180 185 190

Phe Val Leu Glu Leu Leu Met Val Ser Asn Asn Gly Leu Val Thr Leu
195 200 205

Met Cys Phe Leu Val Leu Leu Gly Ser Tyr Thr Ala Leu Leu Val Met
210 215 220

Leu Arg Ser His Ser Arg Glu Gly Arg Ser Lys Ala Leu Ser Thr Cys
225 230 235 240

Ala Ser His Ile Ala Val Val Thr Leu Ile Phe Val Pro Cys Ile Tyr
245 250 255

Val Tyr Thr Arg Pro Phe Arg Thr Phe Pro Met Asp Lys Ala Val Ser
260 265 270

Val Leu Tyr Thr Ile Val Thr Pro Met Leu Asn Pro Ala Ile Tyr Thr
275 280 285

Leu Arg Asn Lys Glu Val Ile Met Ala Met Lys Lys Leu Trp Arg Arg
290 295 300

Lys Lys Asp Pro Ile Gly Pro Leu Glu His Arg Pro Leu His
305 310 315

<210> 21
<211> 1012
<212> DNA
<213> Homo sapiens

<400> 21
aaacacttct cctaaaccat gagcattaac ttgatttctt ctgtcatagg gatatggag 60
acaatataac atccatcaca gagttcctcc tactggatt tcccggtggc ccaaggattc 120
agatgtcctt ctttgggctc ttctccctgt tctacgtctt caccctgtg gggAACggga 180
ccataactggg gtcatctca ctggactcca gactgcacgc cccatgtac ttcttcctct 240
cacacctggc ggtcgctgac atcgcttacg cctgcaacac ggtgccccgg atgctggta 300
accttcgtca tccagccaag cccatcttctt ttgcgggccc catgtgcag acctttctgt 360
tttccacttt tgctgtcaca gaatgtctcc ttctgggtgt gatgtcctat gatctgtacg 420
tggccatctg ccacccctc cgatatttgg ccatcatgac ctggagagtc tgcatcaccc 480
tcgcggtgac ttcttgacc actggagtcc ttttatccctt gattcatctt gtgttacttc 540
tacctttacc cttctgttagg ccccagaaaa ttatcactt ttttgtgaa atcttggctg 600
ttctcaaact tgcctgtgca gatacccaca tcaatgagaa catggcttgc gccggagcaa 660
tttctggct ggtggaccc ttgtccacaa ttgttagttc atatatgtgc atcctctgtg 720
ctatccttca gatccaatca agggaaatgc agaggaaagc cttctgcacc tgcttctccc 780
acctctgtgt gattggactc ttttatggca cagccattat catgtatgtt ggaccaggat 840
atggaaaccc caaggagcag aagaaatatc tcctgctgtt tcacagcctc tttaatccca 900
tgctcaatcc ccttatctgt agtcttagga actcagaagt gaagaatact ttgaagagag 960
tgctggagt agaaaggctt atgaaaag gattatggca ttgtgactga ca 1012

<210> 22
<211> 310
<212> PRT
<213> Homo sapiens

<400> 22
Met Gly Asp Asn Ile Thr Ser Ile Thr Glu Phe Leu Leu Leu Gly Phe
1 5 10 15

Pro Val Gly Pro Arg Ile Gln Met Leu Leu Phe Gly Leu Phe Ser Leu
20 25 30

Phe Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr Ile Leu Gly Leu Ile
35 40 45

Ser Leu Asp Ser Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His
50 55 60

Leu Ala Val Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met
65 70 75 80

Leu Val Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg
85 90 95

Met Met Gln Thr Phe Leu Phe Ser Thr Phe Ala Val Thr Glu Cys Leu
100 105 110

Leu Leu Val Val Met Ser Tyr Asp Leu Tyr Val Ala Ile Cys His Pro
115 120 125

Leu Arg Tyr Leu Ala Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala
130 135 140

Val Thr Ser Trp Thr Thr Gly Val Leu Leu Ser Leu Ile His Leu Val
145 150 155 160

Leu Leu Leu Pro Leu Pro Phe Cys Arg Pro Gln Lys Ile Tyr His Phe
165 170 175

Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr His
180 185 190

Ile Asn Glu Asn Met Val Leu Ala Gly Ala Ile Ser Gly Leu Val Gly
195 200 205

Pro Leu Ser Thr Ile Val Val Ser Tyr Met Cys Ile Leu Cys Ala Ile
210 215 220

Leu Gln Ile Gln Ser Arg Glu Val Gln Arg Lys Ala Phe Cys Thr Cys
225 230 235 240

Phe Ser His Leu Cys Val Ile Gly Leu Phe Tyr Gly Thr Ala Ile Ile
245 250 255

Met Tyr Val Gly Pro Arg Tyr Gly Asn Pro Lys Glu Gln Lys Lys Tyr
260 265 270

Leu Leu Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
275 280 285

Cys Ser Leu Arg Asn Ser Glu Val Lys Asn Thr Leu Lys Arg Val Leu
290 295 300

Gly Val Glu Arg Ala Leu
305 310

<210> 23
<211> 1014
<212> DNA
<213> Homo sapiens

<400> 23
taaacacttc tcctaaacca tgagcattaa cttgattcc tctgtcatag ggatatgggg 60
gacaatataa catccatcac agagttcctc ctactggat ttcccgttgg cccaaggatt 120
cagatgctcc tcttgggct cttctccctg ttctacgtct tcaccctgtct gggaaacggg 180
accatactgg ggctcatctc actggactcc agactgcacg cccccctgtac ttcttcctct 240
cacacctggc ggtcgtcgac atcgcttacg cctgcaacac ggtgccccgg atgctggta 300
acctcctgca tccagccaag cccatctcct ttgcgggccc catgatgcag acctttctgt 360
tttccacttt tgctgtcaca gaatgtctcc tcctgggtgatgtcctat gatctgtacg 420
tggccatctg ccacccctc cgatatttg ccatcatgac ctggagagtc tgcacatcccc 480
tcgcgggtgac ttcctggacc actggagtcc ttttatcctt gattcatctt gtgttacttc 540
tacctttacc cttctgttagg ccccagaaaa tttatcactt tttttgtga aatcttgct 600
gttctcaaac ttgcctgtgc agataccac atcaatgaga acatggtctt ggccggagca 660
atttctgggc tgggtggacc cttgtccaca attgttagtt catatatgtg catcctctgt 720
gctatccttc agatccaatc aaggaaagt cagagggaaag cttctgcac ctgccttc 780
cacctctgtg tgattggact ctttatggc acagccatta tcatgtatgt tggacccaga 840
tatggaaacc ccaaggagca gaagaaatat ctcctgtgt ttcacagcct cttaatccc 900
atgctcaatc cccttatctg tagtcttagg aactcagaag tgaagaatac ttgaagaga 960
gtgctgggag tagaaagggc tttatgaaaa ggattatggc attgtgactg acaa 1014

<210> 24
<211> 310
<212> PRT
<213> Homo sapiens

<400> 24

Met Gly Asp Asn Ile Thr Ser Ile Thr Glu Phe Leu Leu Leu Gly Phe
1 5 10 15

Pro Val Gly Pro Arg Ile Gln Met Leu Leu Phe Gly Leu Phe Ser Leu
20 25 30

Phe Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr Ile Leu Gly Leu Ile
35 40 45

Ser Leu Asp Ser Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His
50 55 60

Leu Ala Val Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met
65 70 75 80

Leu Val Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg

85	90	95
Met Met Gln Thr Phe Leu Phe Ser Thr Phe Ala Val Thr Glu Cys Leu		
100	105	110
Leu Leu Val Val Met Ser Tyr Asp Leu Tyr Val Ala Ile Cys His Pro		
115	120	125
Leu Arg Tyr Leu Ala Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala		
130	135	140
Val Thr Ser Trp Thr Thr Gly Val Leu Leu Ser Leu Ile His Leu Val		
145	150	155
Leu Leu Leu Pro Leu Pro Phe Cys Arg Pro Gln Lys Ile Tyr His Phe		
165	170	175
Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr His		
180	185	190
Ile Asn Glu Asn Met Val Leu Ala Gly Ala Ile Ser Gly Leu Val Gly		
195	200	205
Pro Leu Ser Thr Ile Val Val Ser Tyr Met Cys Ile Leu Cys Ala Ile		
210	215	220
Leu Gln Ile Gln Ser Arg Glu Val Gln Arg Lys Ala Phe Cys Thr Cys		
225	230	235
Phe Ser His Leu Cys Val Ile Gly Leu Phe Tyr Gly Thr Ala Ile Ile		
245	250	255
Met Tyr Val Gly Pro Arg Tyr Gly Asn Pro Lys Glu Gln Lys Lys Tyr		
260	265	270
Leu Leu Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile		
275	280	285
Cys Ser Leu Arg Asn Ser Glu Val Lys Asn Thr Leu Lys Arg Val Leu		
290	295	300
Gly Val Glu Arg Ala Leu		
305	310	

<210> 25

<211> 908

<212> DNA

<213> Homo sapiens

<400> 25

tgtatctggt cacggtgctg aggaacctgc tcagcatcct ggctgtcagc tctgactccc 60
accccccacac acccatgtac ttcttcctct ccaacctgtg ctgggctgac atcggttca 120
ccttggccac gggtcccaag atgattgtgg acatggggtc gcatagcaga gtcatcttt 180
atgagggtcg cctgacacag atgtctttct ttgtccttt tgcatgtata gaagacatgc 240
tcctgactgt gatggcctat gaccaatttg tgccatctg tcacccctg cactaccag 300
tcatcatgaa tcctcacctc tgtgtcttct tagtttggt ttcttttcc cttagcctgt 360
tggattccca gctgcacagt tggattgtgt tacaattcac cttcttcaag aatgtggaaa 420
tctctaattt ttctgtgat ccatctcaac ttctcaacct tgctgttct gacggcatca 480
tcaatagcat attcatatat ttagatagta ttctgttcag ttttcttccc atttcaggaa 540
tcctttgtc ttactataaa attgtcccct ccattctaag aatttcatcg tcagatggaa 600
agtataaagc ctctccatc tgtggcttc acctggcagt tgggtctta ttttatggaa 660
caggcattgg cgtgtaccta acttcagctg tgtcaccacc cccaggaat ggtgtgggg 720
cgtcagtgtat gtatgtgtg gtcacccca tgctgaaccc ttcatctac agcctgagaa 780
acagggatatac acaaagtgtc ctgcggaggc tgtgcagcag aacagtcgaa tctcatgata 840
tgttccatcc ttttcttgt gtgggtgaga aaggcaacc acattaaatc tctacatctg 900
taaattctt 908

<210> 26

<211> 270

<212> PRT

<213> Homo sapiens

<400> 26

Met Tyr Phe Phe Leu Ser Asn Leu Cys Trp Ala Asp Ile Gly Phe Thr
1 5 10 15

Leu Ala Thr Val Pro Lys Met Ile Val Asp Met Gly Ser His Ser Arg
20 25 30

Val Ile Ser Tyr Glu Gly Cys Leu Thr Gln Met Ser Phe Phe Val Leu
35 40 45

Phe Ala Cys Ile Glu Asp Met Leu Leu Thr Val Met Ala Tyr Asp Gln
50 55 60

Phe Val Ala Ile Cys His Pro Leu His Tyr Pro Val Ile Met Asn Pro
65 70 75 80

His Leu Cys Val Phe Leu Val Leu Ser Phe Phe Leu Ser Leu Leu
85 90 95

Asp Ser Gln Leu His Ser Trp Ile Val Leu Gln Phe Thr Phe Phe Lys
100 105 110

Asn Val Glu Ile Ser Asn Phe Phe Cys Asp Pro Ser Gln Leu Leu Asn
115 120 125

Leu Ala Cys Ser Asp Gly Ile Ile Asn Ser Ile Phe Ile Tyr Leu Asp
130 135 140

Ser Ile Leu Phe Ser Phe Leu Pro Ile Ser Gly Ile Leu Leu Ser Tyr
145 150 155 160

Tyr Lys Ile Val Pro Ser Ile Leu Arg Ile Ser Ser Ser Asp Gly Lys
165 170 175

Tyr Lys Ala Phe Ser Ile Cys Gly Ser His Leu Ala Val Val Cys Leu
180 185 190

Phe Tyr Gly Thr Gly Ile Gly Val Tyr Leu Thr Ser Ala Val Ser Pro
195 200 205

Pro Pro Arg Asn Gly Val Val Ala Ser Val Met Tyr Ala Val Val Thr
210 215 220

Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Gln
225 230 235 240

Ser Val Leu Arg Arg Leu Cys Ser Arg Thr Val Glu Ser His Asp Met
245 250 255

Phe His Pro Phe Ser Cys Val Gly Glu Lys Gly Gln Pro His
260 265 270

<210> 27
<211> 307
<212> PRT
<213> Homo sapiens

<400> 27
Met Ser Gly Thr Asn Gln Ser Ser Val Ser Glu Phe Leu Leu Leu Gly
1 5 10 15

Leu Ser Arg Gln Pro Gln Gln His Leu Leu Phe Val Phe Phe Leu
20 25 30

Ser Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ser
35 40 45

Val Ser Ile Asp Ser Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ser
50 55 60

Asn	Leu	Ser	Phe	Val	Asp	Ile	Cys	Phe	Ser	Phe	Thr	Thr	Val	Pro	Lys
65															80
Met	Leu	Ala	Asn	His	Ile	Leu	Glu	Thr	Gln	Thr	Ile	Ser	Phe	Cys	Gly
															95
Cys	Leu	Thr	Gln	Met	Tyr	Phe	Val	Phe	Met	Phe	Val	Asp	Met	Asp	Asn
															110
Phe	Leu	Leu	Ala	Val	Met	Ala	Tyr	Asp	His	Phe	Val	Ala	Val	Cys	His
															125
Pro	Leu	His	Tyr	Thr	Ala	Lys	Met	Thr	His	Gln	Leu	Cys	Ala	Leu	Leu
															140
Val	Ala	Gly	Leu	Trp	Val	Val	Ala	Asn	Leu	Asn	Val	Leu	Leu	His	Thr
															160
145															
Leu	Leu	Met	Ala	Pro	Leu	Ser	Phe	Cys	Ala	Asp	Asn	Ala	Ile	Thr	His
															175
Phe	Phe	Cys	Asp	Val	Thr	Pro	Leu	Leu	Lys	Leu	Ser	Cys	Ser	Asp	Thr
															190
His	Leu	Asn	Glu	Val	Ile	Ile	Leu	Ser	Glu	Gly	Ala	Leu	Val	Met	Ile
															205
Thr	Pro	Phe	Leu	Cys	Ile	Leu	Ala	Ser	Tyr	Met	His	Ile	Thr	Cys	Thr
															220
Val	Leu	Lys	Val	Pro	Ser	Thr	Lys	Gly	Arg	Trp	Lys	Ala	Phe	Ser	Thr
															240
225															
Cys	Gly	Ser	His	Leu	Ala	Val	Val	Leu	Leu	Phe	Tyr	Ser	Thr	Ile	Ile
															255
Ala	Val	Tyr	Phe	Asn	Pro	Leu	Ser	Ser	His	Ser	Ala	Glu	Lys	Asp	Thr
															270
Met	Ala	Thr	Val	Leu	Tyr	Thr	Val	Val	Thr	Pro	Met	Leu	Asn	Pro	Phe
															285
Ile	Tyr	Ser	Leu	Arg	Asn	Arg	Tyr	Leu	Lys	Gly	Ala	Leu	Lys	Lys	Val
															300
Val	Gly	Arg													
															305

<210> 28
<211> 307
<212> PRT
<213> Homo sapiens

<400> 28
Met Glu Gly Lys Asn Gln Thr Asn Ile Ser Glu Phe Leu Leu Leu Gly
1 5 10 15

Phe Ser Ser Trp Gln Gln Gln Val Leu Leu Phe Ala Leu Phe Leu
20 25 30

Cys Leu Tyr Leu Thr Gly Leu Phe Gly Asn Leu Leu Ile Leu Leu Ala
35 40 45

Ile Gly Ser Asp His Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ala
50 55 60

Asn Leu Ser Leu Val Asp Leu Cys Leu Pro Ser Ala Thr Val Pro Lys
65 70 75 80

Met Leu Leu Asn Ile Gln Thr Gln Thr Gln Thr Ile Ser Tyr Pro Gly
85 90 95

Cys Leu Ala Gln Met Tyr Phe Cys Met Met Phe Ala Asn Met Asp Asn
100 105 110

Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
115 120 125

Pro Leu His Tyr Ser Thr Ile Met Ala Leu Arg Leu Cys Ala Ser Leu
130 135 140

Val Ala Ala Pro Trp Val Ile Ala Ile Leu Asn Pro Leu Leu His Thr
145 150 155 160

Leu Met Met Ala His Leu His Phe Cys Ser Asp Asn Val Ile His His
165 170 175

Phe Phe Cys Asp Ile Asn Ser Leu Leu Pro Leu Ser Cys Ser Asp Thr
180 185 190

Ser Leu Asn Gln Leu Ser Val Leu Ala Thr Val Gly Leu Ile Phe Val
195 200 205

Val Pro Ser Val Cys Ile Leu Val Ser Tyr Ile Leu Ile Val Ser Ala

210

215

220

Val Met Lys Val Pro Ser Ala Gln Gly Lys Leu Lys Ala Phe Ser Thr
225 230 235 240

Cys Gly Ser His Leu Ala Leu Val Ile Leu Phe Tyr Gly Ala Ile Thr
245 250 255

Gly Val Tyr Met Ser Pro Leu Ser Asn His Ser Thr Glu Lys Asp Ser
260 265 270

Ala Ala Ser Val Ile Phe Met Val Val Ala Pro Val Leu Asn Pro Phe
275 280 285

Ile Tyr Ser Leu Arg Asn Asn Glu Leu Lys Gly Thr Leu Lys Lys Thr
290 295 300

Leu Ser Arg

305

<210> 29

<211> 299

<212> PRT

<213> Homo sapiens

<400> 29

Met Glu Gly Lys Asn Gln Thr Asn Ile Ser Glu Phe Leu Leu Gly
1 5 10 15

Phe Ser Ser Trp Gln Gln Gln Val Leu Leu Phe Ala Leu Phe Leu
20 25 30

Cys Leu Tyr Leu Thr Gly Leu Phe Gly Asn Leu Leu Ile Leu Leu Ala
35 40 45

Ile Gly Ser Asp His Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ala
50 55 60

Asn Leu Ser Leu Val Asp Leu Cys Leu Pro Ser Ala Thr Val Pro Lys
65 70 75 80

Met Leu Leu Asn Ile Gln Thr Gln Thr Gln Thr Ile Ser Tyr Pro Gly
85 90 95

Cys Leu Ala Gln Met Tyr Phe Cys Met Met Phe Ala Asn Met Asp Asn
100 105 110

Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys His
115 120 125

Pro Leu His Tyr Ser Thr Ile Met Ala Leu Arg Leu Cys Ala Ser Leu
130 135 140

Val Ala Ala Pro Trp Val Ile Ala Ile Leu Asn Pro Leu Leu His Thr
145 150 155 160

Leu Met Met Ala His Leu His Phe Cys Ser Asp Asn Val Ile His His
165 170 175

Phe Phe Cys Asp Ile Asn Ser Leu Leu Pro Leu Ser Cys Ser Asp Thr
180 185 190

Ser Leu Asn Gln Leu Ser Val Leu Ala Thr Val Gly Leu Ile Phe Val
195 200 205

Val Pro Ser Val Cys Ile Leu Val Ser Tyr Ile Leu Ile Val Ser Ala
210 215 220

Val Met Lys Val Pro Ser Ala Gln Gly Lys Leu Lys Ala Phe Ser Thr
225 230 235 240

Cys Gly Ser His Leu Ala Leu Val Ile Leu Phe Tyr Gly Ala Ile Thr
245 250 255

Gly Val Tyr Met Ser Pro Leu Ser Asn His Ser Thr Glu Lys Asp Ser
260 265 270

Ala Ala Ser Val Ile Phe Met Val Val Ala Pro Val Leu Asn Pro Phe
275 280 285

Ile Tyr Ser Leu Arg Asn Asn Glu Leu Lys Gly
290 295

<210> 30

<211> 299

<212> PRT

<213> Homo sapiens

<400> 30

Met Ser Gly Thr Asn Gln Ser Ser Val Ser Glu Phe Leu Leu Gly
1 5 10 15

Leu Ser Arg Gln Pro Gln Gln His Leu Leu Phe Val Phe Phe Leu
20 25 30

Ser Met Tyr Leu Ala Thr Val Leu Gly Asn Leu Leu Ile Ile Leu Ser
 35 40 45

Val Ser Ile Asp Ser Cys Leu His Thr Pro Met Tyr Phe Phe Leu Ser
 50 55 60

Asn Leu Ser Phe Val Asp Ile Cys Phe Ser Phe Thr Thr Val Pro Lys
 65 70 75 80

Met Leu Ala Asn His Ile Leu Glu Thr Gln Thr Ile Ser Phe Cys Gly
 85 90 95

Cys Leu Thr Gln Met Tyr Phe Val Phe Met Phe Val Asp Met Asp Asn
 100 105 110

Phe Leu Leu Ala Val Met Ala Tyr Asp His Phe Val Ala Val Cys His
 115 120 125

Pro Leu His Tyr Thr Ala Lys Met Thr His Gln Leu Cys Ala Leu Leu
 130 135 140

Val Ala Gly Leu Trp Val Val Ala Asn Leu Asn Val Leu Leu His Thr
 145 150 155 160

Leu Leu Met Ala Pro Leu Ser Phe Cys Ala Asp Asn Ala Ile Thr His
 165 170 175

Phe Phe Cys Asp Val Thr Pro Leu Leu Lys Leu Ser Cys Ser Asp Thr
 180 185 190

His Leu Asn Glu Val Ile Ile Leu Ser Glu Gly Ala Leu Val Met Ile
 195 200 205

Thr Pro Phe Leu Cys Ile Leu Ala Ser Tyr Met His Ile Thr Cys Thr
 210 215 220

Val Leu Lys Val Pro Ser Thr Lys Gly Arg Trp Lys Ala Phe Ser Thr
 225 230 235 240

Cys Gly Ser His Leu Ala Val Val Leu Leu Phe Tyr Ser Thr Ile Ile
 245 250 255

Ala Val Tyr Phe Asn Pro Leu Ser Ser His Ser Ala Glu Lys Asp Thr
 260 265 270

Met Ala Thr Val Leu Tyr Thr Val Val Thr Pro Met Leu Asn Pro Phe
 275 280 285

Ile Tyr Ser Leu Arg Asn Arg Tyr Leu Lys Gly
290 295

<210> 31
<211> 189
<212> PRT
<213> Homo sapiens

<400> 31
Ala Ile Gly Ser Asp His Cys Leu His Thr Pro Met Tyr Phe Phe Leu
1 5 10 15

Ala Asn Leu Ser Leu Val Asp Leu Cys Leu Pro Ser Ala Thr Val Pro
20 25 30

Lys Met Leu Leu Asn Ile Gln Thr Gln Thr Gln Thr Ile Ser Tyr Pro
35 40 45

Gly Cys Leu Ala Gln Met Tyr Phe Cys Met Met Phe Ala Asn Met Asp
50 55 60

Asn Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Val Ala Ile Cys
65 70 75 80

His Pro Leu His Tyr Ser Thr Ile Met Ala Leu Arg Leu Cys Ala Ser
85 90 95

Leu Val Ala Ala Pro Trp Val Ile Ala Ile Leu Asn Pro Leu Leu His
100 105 110

Thr Leu Met Met Ala His Leu His Phe Cys Ser Asp Asn Val Ile His
115 120 125

His Phe Phe Cys Asp Ile Asn Ser Leu Leu Pro Leu Ser Cys Ser Asp
130 135 140

Thr Ser Leu Asn Gln Leu Ser Val Leu Ala Thr Val Gly Leu Ile Phe
145 150 155 160

Val Val Pro Ser Val Cys Ile Leu Val Ser Tyr Ile Leu Ile Val Ser
165 170 175

Ala Val Met Lys Val Pro Ser Ala Gln Gly Lys Leu Lys
180 185

<210> 32
<211> 170
<212> PRT
<213> Homo sapiens

<400> 32
Ala Val Ser Arg Glu Lys Ala Leu Gln Thr Thr Thr Asn Tyr Leu Ile
1 5 10 15

Val Ser Leu Ala Val Ala Asp Leu Leu Val Ala Thr Leu Val Met Pro
20 25 30

Trp Val Val Tyr Leu Glu Val Val Gly Glu Trp Lys Phe Ser Arg Ile
35 40 45

His Cys Asp Ile Phe Val Thr Leu Asp Val Met Met Cys Thr Ala Ser
50 55 60

Ile Leu Asn Leu Cys Ala Ile Ser Ile Asp Arg Tyr Thr Ala Val Ala
65 70 75 80

Met Pro Met Leu Tyr Asn Thr Arg Tyr Ser Ser Lys Arg Arg Val Thr
85 90 95

Val Met Ile Ala Ile Val Trp Val Leu Ser Phe Thr Ile Ser Cys Pro
100 105 110

Met Leu Phe Gly Leu Asn Asn Thr Asp Gln Asn Glu Cys Ile Ile Ala
115 120 125

Asn Pro Ala Phe Val Val Tyr Ser Ser Ile Val Ser Phe Tyr Val Pro
130 135 140

Phe Ile Val Thr Leu Leu Val Tyr Ile Lys Ile Tyr Ile Val Leu Arg
145 150 155 160

Arg Arg Arg Lys Arg Val Asn Thr Lys Arg
165 170

<210> 33
<211> 92
<212> DNA
<213> Homo sapiens

<400> 33
gggcgcggtg gctcacgcct gtaatccca gactttggga ggccgaggcg ggtggatcat 60
gaggtcagga gatcgagacc atcctggcta ac 92

<210> 34
<211> 1040
<212> DNA
<213> Homo sapiens

<400> 34
ccgaacaagt taaaatgaat ctgttttaa acacttctcc taaaccatga gcattaactt 60
gatttcctct gtcataggga tatggagac aatataacat ccacatcaga gttcctccta 120
ctgggatttc ccgttggccc aaggattcag atgctcctct ttgggctctt ctccctgttc 180
tacgtcttca ccctgctggg gaacgggacc atactgggc tcacatcact ggactccaga 240
ctgcacgccc ccatgtactt cttcctctca cacctggcgg tcgtcgacat cgcctacgcc 300
tgcaacacgg tgccccggat gctggtaac ctcctgcac cagccaagcc catctcctt 360
gcgggcccga tgcacatcactt cttctgttt tccacttttgc ctgtcacaga atgtctcctc 420
ctgggtgtga tgccttatga tctgtacgtg gcatctgcc acccccctcg atatttggcc 480
atcatgacct ggagagtctg catcaccctc ggggtgactt cctggaccac tggagtcctt 540
ttatccttga ttcatcttgtt gttacttcta cctttaccct tctgttaggcc ccagaaaatt 600
tatcactttt tttgtgaaat cttggctgtt ctcaaacttg cctgtgcaga taccacatc 660
aatgagaaca tggcttggc cggagcaatt tctggctgg tggaccctt gtccacaatt 720
gtagttcat atatgtcat cctctgtgt atccttcaga tccaaatcaag ggaagttcag 780
aggaaagcct tccgcacctg cttctccac ctctgtgtga ttggactcgt ttatggcaca 840
gccattatca tgcacatcactt ctttttttttgc tccaaatcccc ttatctgttag tcttaggaac 900
ctgctgtttc acagcctctt taatccatg ctcaatcccc ttatctgttag tcttaggaac 960
tcagaagtga agaatactt gaagagagtg ctggagtag aaaggctt atgaaaagga 1020
ttatggcatt gtgactgaca 1040

<210> 35
<211> 260
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> (152)..(165)
<223> Wherein Xaa is any amino acid.

<400> 35
Asp Ser Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His Leu Ala
1 5 10 15

Val Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met Leu Val
20 25 30

Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg Met Met
35 40 45

Gln	Thr	Phe	Leu	Phe	Ser	Thr	Phe	Ala	Val	Thr	Glu	Cys	Leu	Leu	Leu
50						55				60					
Val	Val	Met	Ser	Tyr	Asp	Leu	Tyr	Val	Ala	Ile	Cys	His	Pro	Leu	Arg
65						70				75				80	
Tyr	Leu	Ala	Ile	Met	Thr	Trp	Arg	Val	Cys	Ile	Thr	Leu	Ala	Val	Thr
					85				90					95	
Ser	Trp	Thr	Thr	Gly	Val	Xaa									
					100			105				110			
Xaa	Xaa	Xaa	Pro	Phe	Cys	Arg	Pro	Gln	Lys	Ile	Tyr	His	Phe	Phe	Cys
					115			120			125				
Glu	Ile	Leu	Ala	Val	Leu	Lys	Leu	Ala	Cys	Ala	Asp	Thr	His	Ile	Asn
					130			135			140				
Glu	Asn	Met	Val	Leu	Ala	Gly	Ala	Ile	Ser	Gly	Leu	Val	Gly	Pro	Leu
					145			150			155			160	
Ser	Thr	Ile	Val	Val	Ser	Tyr	Met	Cys	Ile	Leu	Cys	Ala	Ile	Leu	Gln
					165				170				175		
Ile	Gln	Ser	Arg	Glu	Val	Gln	Arg	Lys	Ala	Phe	Arg	Thr	Cys	Phe	Ser
					180			185			190				
His	Leu	Cys	Val	Ile	Gly	Leu	Val	Tyr	Gly	Thr	Ala	Ile	Ile	Met	Tyr
					195			200			205				
Val	Gly	Pro	Arg	Tyr	Gly	Asn	Pro	Lys	Glu	Gln	Lys	Lys	Tyr	Leu	Leu
					210			215			220				
Leu	Phe	His	Ser	Leu	Phe	Asn	Pro	Met	Leu	Asn	Pro	Leu	Ile	Cys	Ser
					225			230			235			240	
Leu	Arg	Asn	Ser	Glu	Val	Lys	Asn	Thr	Leu	Lys	Arg	Val	Leu	Gly	Val
					245				250			255			
Glu	Arg	Ala	Leu												
			260												

<210> 36
<211> 260
<212> PRT
<213> Homo sapiens

<400> 36

Asp Ser Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His Leu Ala
1 5 10 15

Val Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met Leu Val
20 25 30

Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg Met Met
35 40 45

Gln Thr Phe Leu Phe Ser Thr Phe Ala Val Thr Glu Cys Leu Leu Leu
50 55 60

Val Val Met Ser Tyr Asp Leu Tyr Val Ala Ile Cys His Pro Leu Arg
65 70 75 80

Tyr Leu Ala Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala Val Thr
85 90 95

Ser Trp Thr Thr Gly Val Leu Leu Ser Leu Ile His Leu Val Leu Leu
100 105 110

Leu Pro Leu Pro Phe Cys Arg Pro Gln Lys Ile Tyr His Phe Phe Cys
115 120 125

Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr His Ile Asn
130 135 140

Glu Asn Met Val Leu Ala Gly Ala Ile Ser Gly Leu Val Gly Pro Leu
145 150 155 160

Ser Thr Ile Val Val Ser Tyr Met Cys Ile Leu Cys Ala Ile Leu Gln
165 170 175

Ile Gln Ser Arg Glu Val Gln Arg Lys Ala Phe Arg Thr Cys Phe Ser
180 185 190

His Leu Cys Val Ile Gly Leu Val Tyr Gly Thr Ala Ile Ile Met Tyr
195 200 205

Val Gly Pro Arg Tyr Gly Asn Pro Lys Glu Gln Lys Lys Tyr Leu Leu
210 215 220

Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile Cys Ser
225 230 235 240

Leu Arg Asn Ser Glu Val Lys Asn Thr Leu Lys Arg Val Leu Gly Val
245 250 255

Glu Arg Ala Leu
260

<210> 37
<211> 92
<212> DNA
<213> Homo sapiens

<400> 37
ggatgcggtg gctcacgcct gtaatccag cacttggga ggccgaggtg ggccgatcat 60
gaggtcagtt gttcgagacc aacctggtca ac 92

<210> 38
<211> 310
<212> PRT
<213> Homo sapiens

<400> 38
Met Gly Asp Asn Ile Thr Ser Ile Arg Glu Phe Leu Leu Leu Gly Phe
1 5 10 15

Pro Val Gly Pro Arg Ile Gln Met Leu Leu Phe Gly Leu Phe Ser Leu
20 25 30

Phe Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr Ile Leu Gly Leu Ile
35 40 45

Ser Leu Asp Ser Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His
50 55 60

Leu Ala Val Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met
65 70 75 80

Leu Val Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg
85 90 95

Met Met Gln Thr Phe Leu Phe Ser Thr Phe Ala Val Thr Glu Cys Leu
100 105 110

Leu Leu Val Val Met Ser Tyr Asp Leu Tyr Val Ala Ile Cys His Pro
115 120 125

Leu Arg Tyr Leu Ala Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala
130 135 140

Val Thr Ser Trp Thr Thr Gly Val Leu Leu Ser Leu Ile His Leu Val
145 150 155 160

Leu Leu Leu Pro Leu Pro Phe Cys Arg Pro Gln Lys Ile Tyr His Phe
165 170 175

Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr His
180 185 190

Ile Asn Glu Asn Met Val Leu Ala Gly Ala Ile Ser Gly Leu Val Gly
195 200 205

Pro Leu Ser Thr Ile Val Val Ser Tyr Met Cys Ile Leu Cys Ala Ile
210 215 220

Leu Gln Ile Gln Ser Arg Glu Val Gln Arg Lys Ala Phe Arg Thr Cys
225 230 235 240

Phe Ser His Leu Cys Val Ile Gly Leu Val Tyr Gly Thr Ala Ile Ile
245 250 255

Met Tyr Val Gly Pro Arg Tyr Gly Asn Pro Lys Glu Gln Lys Lys Tyr
260 265 270

Leu Leu Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
275 280 285

Cys Ser Leu Arg Asn Ser Glu Val Lys Asn Thr Leu Lys Arg Val Leu
290 295 300

Gly Val Glu Arg Ala Leu
305 310

<210> 39
<211> 183
<212> PRT
<213> Homo sapiens

<400> 39
Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His Leu Ala Val Val
1 5 10 15

Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met Leu Val Asn Leu
20 25 30

Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg Met Met Gln Thr
35 40 45

Phe Leu Phe Ser Thr Phe Ala Val Thr Glu Cys Leu .Leu Leu Val Val
50 55 60

Met Ser Tyr Asp Leu Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Leu
65 70 75 80

Ala Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala Val Thr Ser Trp
85 90 95

Thr Thr Gly Val Leu Leu Ser Leu Ile His Leu Val Leu Leu Pro
100 105 110

Leu Pro Phe Cys Arg Pro Gln Lys Ile Tyr His Phe Phe Cys Glu Ile
115 120 125

Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr His Ile Asn Glu Asn
130 135 140

Met Val Leu Ala Gly Ala Ile Ser Gly Leu Val Gly Pro Leu Ser Thr
145 150 155 160

Ile Val Val Ser Tyr Met Cys Ile Leu Cys Ala Ile Leu Gln Ile Gln
165 170 175

Ser Arg Glu Val Gln Arg Lys
180

<210> 40
<211> 164
<212> PRT
<213> Homo sapiens

<400> 40
Ala Leu Gln Thr Thr Asn Tyr Leu Ile Val Ser Leu Ala Val Ala
1 5 10 15

Asp Leu Leu Val Ala Thr Leu Val Met Pro Trp Val Val Tyr Leu Glu
20 25 30

Val Val Gly Glu Trp Lys Phe Ser Arg Ile His Cys Asp Ile Phe Val
35 40 45

Thr Leu Asp Val Met Met Cys Thr Ala Ser Ile Leu Asn Leu Cys Ala
50 55 60

Ile Ser Ile Asp Arg Tyr Thr Ala Val Ala Met Pro Met Leu Tyr Asn

65	70	75	80
Thr Arg Tyr Ser Ser Lys Arg Arg Val Thr Val Met Ile Ala Ile Val			
85	90	95	
Trp Val Leu Ser Phe Thr Ile Ser Cys Pro Met Leu Phe Gly Leu Asn			
100	105	110	
Asn Thr Asp Gln Asn Glu Cys Ile Ile Ala Asn Pro Ala Phe Val Val			
115	120	125	
Tyr Ser Ser Ile Val Ser Phe Tyr Val Pro Phe Ile Val Thr Leu Leu			
130	135	140	
Val Tyr Ile Lys Ile Tyr Ile Val Leu Arg Arg Arg Arg Lys Arg Val			
145	150	155	160
Asn Thr Lys Arg			

<210> 41
 <211> 94
 <212> DNA
 <213> Homo sapiens

<400> 41
 ccgggcgcgg tggctcacgc ctgtaatccc agcactttgg gaggccgagg cgggtggatc 60
 atgaggtcag gagatcgaga ccatcctggc taac 94

<210> 42
 <211> 1090
 <212> DNA
 <213> Homo sapiens

<400> 42
 aagaagttct tcagatgcga gtttcaaca aaaccactgt gtttacacag ttcattctgg 60
 tgggttctc cagcctgggg gagctccagc tgctgcttt tgtcatctt cttctcctat 120
 acttgacaat cctgggtggcc aatgtgacca tcatggccgt tattcgcttc agctggactc 180
 tccacactcc catgtatggc tttctattca tcctttcatt ttctgagtcc tgctacactt 240
 ttgtcatcat ccctcagctg ctggtccacc tgctctcaga caccaagacc attccttca 300
 tggctgtgc caccctgctg ttcttttcc ttggcttgc ttgcaccaac tgcctcctca 360
 ttgctgtat gggatatgtat cgctatgtat caatttgcac ccctctgagg tacacactca 420
 tcataaaaca aaggctgggg ttggagttga tttctcttc aggagccaca ggtttcttta 480
 ttgcttttgtt ggccaccaac ctcatttgc acatgcgtt ttgtggccccc aacagggtta 540
 accactattt ctgtgacatg gcacctgtta tcaagttgc ctgcactgac acccatgtga 600
 aagagctggc tttatattgc ctcagcatcc tgtaattat ggtgccttt ctgttaattc 660

tcatatccta tggcttcata gttaacacca tcctgaagat cccctcagct gagggcaaga 720
aggccttgt cacctgtgcc tcacatctca ctgtggtctt tgtccactat ggctgtgcct 780
ctatcatcta tctgcggccc aagtccaaatg ctgcctcaga caaggatcag ttggtggcag 840
tgacctacac agtggttact cccttactta atcctttgt ctacagtctg aggaacaaag 900
aggtaaaaac tgcattgaaa agagttcttg gaatgcctgt ggcaaccaag atgagctaac 960
aaaaaaataat aataaaatta actaggatag tcacagaaga aatcaaaggc ataaaatttt 1020
ctgaccttta atgcatgtct cagacagtgt ttccaaggat taagactact cttgccttt 1080
tattttctcc 1090

<210> 43

<211> 303

<212> PRT

<213> Homo sapiens

<400> 43

Met Arg Gly Phe Asn Lys Thr Thr Val Val Thr Gln Phe Ile Leu Val
1 5 10 15

Gly Phe Ser Ser Leu Gly Glu Leu Gln Leu Leu Leu Phe Val Ile Phe
20 25 30

Leu Leu Leu Tyr Leu Thr Ile Leu Val Ala Asn Val Thr Ile Met Ala
35 40 45

Val Ile Arg Phe Ser Trp Thr Leu His Thr Pro Met Tyr Gly Phe Leu
50 55 60

Phe Ile Leu Ser Phe Ser Glu Ser Cys Tyr Thr Phe Val Ile Ile Pro
65 70 75 80

Gln Leu Leu Val His Leu Leu Ser Asp Thr Lys Thr Ile Ser Phe Met
85 90 95

Ala Cys Ala Thr Gln Leu Phe Phe Leu Gly Phe Ala Cys Thr Asn
100 105 110

Cys Leu Leu Ile Ala Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys
115 120 125

His Pro Leu Arg Tyr Thr Leu Ile Ile Asn Lys Arg Leu Gly Leu Glu
130 135 140

Leu Ile Ser Leu Ser Gly Ala Thr Gly Phe Phe Ile Ala Leu Val Ala
145 150 155 160

Thr Asn Leu Ile Cys Asp Met Arg Phe Cys Gly Pro Asn Arg Val Asn
165 170 175

His Tyr Phe Cys Asp Met Ala Pro Val Ile Lys Leu Ala Cys Thr Asp
180 185 190

Thr His Val Lys Glu Leu Ala Leu Phe Ser Leu Ser Ile Leu Val Ile
195 200 205

Met Val Pro Phe Leu Leu Ile Leu Ser Tyr Gly Phe Ile Val Asn
210 215 220

Thr Ile Leu Lys Ile Pro Ser Ala Glu Gly Lys Lys Ala Phe Val Thr
225 230 235 240

Cys Ala Ser His Leu Thr Val Val Phe Val His Tyr Gly Cys Ala Ser
245 250 255

Ile Ile Tyr Leu Arg Pro Lys Ser Lys Ser Ala Ser Asp Lys Asp Gln
260 265 270

Leu Val Ala Val Thr Tyr Thr Val Val Thr Pro Leu Leu Asn Pro Leu
275 280 285

Val Tyr Ser Leu Arg Asn Lys Glu Val Lys Thr Ala Leu Lys Arg
290 295 300

<210> 44

<211> 304

<212> PRT

<213> Homo sapiens

<400> 44

Met Leu Gly Leu Asn His Thr Ser Met Ser Glu Phe Ile Leu Val Gly
1 5 10 15

Phe Ser Ala Phe Pro His Leu Gln Leu Met Leu Phe Leu Leu Phe Leu
20 25 30

Leu Met Tyr Leu Phe Thr Leu Leu Gly Asn Leu Leu Ile Met Ala Thr
35 40 45

Val Trp Ser Glu Arg Ser Leu His Thr Pro Met Tyr Leu Phe Leu Cys
50 55 60

Val Leu Ser Val Ser Glu Ile Leu Tyr Thr Val Ala Ile Ile Pro Arg
65 70 75 80

Met Leu Ala Asp Leu Leu Ser Thr Gln Arg Ser Ile Ala Phe Leu Ala

85	90	95
Cys Ala Ser Gln Met Phe Phe Ser Phe Ser Phe Gly Phe Thr His Ser		
100	105	110
Phe Leu Leu Thr Val Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys His		
115	120	125
Pro Leu Arg Tyr Asn Val Leu Met Ser Pro Arg Gly Cys Ala Cys Leu		
130	135	140
Val Gly Cys Ser Trp Ala Gly Gly Ser Val Met Gly Met Val Val Thr		
145	150	155
Ser Ala Ile Phe Gln Leu Thr Phe Cys Gly Ser His Glu Ile Gln His		
165	170	175
Phe Leu Cys His Val Pro Pro Leu Leu Lys Leu Ala Cys Gly Asn Asn		
180	185	190
Val Pro Ala Val Ala Leu Gly Val Gly Leu Val Cys Ile Met Ala Leu		
195	200	205
Leu Gly Gly Phe Leu Leu Ile Leu Leu Ser Tyr Ala Phe Ile Val Ala		
210	215	220
Asp Ile Leu Lys Ile Pro Ser Ala Glu Gly Arg Asn Lys Ala Phe Ser		
225	230	235
Thr Cys Ala Ser His Leu Ile Val Val Ile Val His Tyr Gly Phe Ala		
245	250	255
Ser Val Ile Tyr Leu Lys Pro Lys Gly Pro His Ser Gln Glu Gln Asp		
260	265	270
Thr Leu Met Ala Thr Thr Tyr Ala Val Leu Thr Pro Phe Leu Ser Pro		
275	280	285
Ile Ile Phe Ser Leu Arg Asn Lys Glu Leu Lys Val Ala Met Lys Arg		
290	295	300

<210> 45
 <211> 187
 <212> PRT

<213> Homo sapiens

<400> 45

Asn Val Thr Ile Met Ala Val Ile Arg Phe Ser Trp Thr Leu His Thr
1 5 10 15

Pro Met Tyr Gly Phe Leu Phe Ile Leu Ser Phe Ser Glu Ser Cys Tyr
20 25 30

Thr Phe Val Ile Ile Pro Gln Leu Leu Val His Leu Leu Ser Asp Thr
35 40 45

Lys Thr Ile Ser Phe Met Ala Cys Ala Thr Gln Leu Phe Phe Leu
50 55 60

Gly Phe Ala Cys Thr Asn Cys Leu Leu Ile Ala Val Met Gly Tyr Asp
65 70 75 80

Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Thr Leu Ile Ile Asn
85 90 95

Lys Arg Leu Gly Leu Glu Leu Ile Ser Leu Ser Gly Ala Thr Gly Phe
100 105 110

Phe Ile Ala Leu Val Ala Thr Asn Leu Ile Cys Asp Met Arg Phe Cys
115 120 125

Gly Pro Asn Arg Val Asn His Tyr Phe Cys Asp Met Ala Pro Val Ile
130 135 140

Lys Leu Ala Cys Thr Asp Thr His Val Lys Glu Leu Ala Leu Phe Ser
145 150 155 160

Leu Ser Ile Leu Val Ile Met Val Pro Phe Leu Leu Ile Leu Ile Ser
165 170 175

Tyr Gly Phe Ile Val Asn Thr Ile Leu Lys Ile
180 185

<210> 46

<211> 168

<212> PRT

<213> Homo sapiens

<400> 46

Asn Val Leu Val Cys Met Ala Val Ser Arg Glu Lys Ala Leu Gln Thr
1 5 10 15

Thr	Thr	Asn	Tyr	Leu	Ile	Val	Ser	Leu	Ala	Val	Ala	Asp	Leu	Leu	Val
20							25						30		
Ala	Thr	Leu	Val	Met	Pro	Trp	Val	Val	Tyr	Leu	Glu	Val	Val	Gly	Glu
35							40						45		
Trp	Lys	Phe	Ser	Arg	Ile	His	Cys	Asp	Ile	Phe	Val	Thr	Leu	Asp	Val
50							55					60			
Met	Met	Cys	Thr	Ala	Ser	Ile	Leu	Asn	Leu	Cys	Ala	Ile	Ser	Ile	Asp
65							70					75			80
Arg	Tyr	Thr	Ala	Val	Ala	Met	Pro	Met	Leu	Tyr	Asn	Thr	Arg	Tyr	Ser
85								90					95		
Ser	Lys	Arg	Arg	Val	Thr	Val	Met	Ile	Ala	Ile	Val	Trp	Val	Leu	Ser
100							105					110			
Phe	Thr	Ile	Ser	Cys	Pro	Met	Leu	Phe	Gly	Leu	Asn	Asn	Thr	Asp	Gln
115							120					125			
Asn	Glu	Cys	Ile	Ile	Ala	Asn	Pro	Ala	Phe	Val	Val	Tyr	Ser	Ser	Ile
130							135					140			
Val	Ser	Phe	Tyr	Val	Pro	Phe	Ile	Val	Thr	Leu	Leu	Val	Tyr	Ile	Lys
145							150					155			160
Ile	Tyr	Ile	Val	Leu	Arg	Arg	Arg								
							165								

<210> 47
 <211> 96
 <212> DNA
 <213> Homo sapiens

<400> 47
 ctgggctcgg tggctcacac gtgtaatccc agcactttgg gaggccgagg cgggcggatc 60
 acatgaggtc aggagttcga gaccagcctg gtcaac 96

<210> 48
 <211> 94
 <212> DNA
 <213> Homo sapiens

<400> 48

gttagccagg atggtctcga tctcctgacc tcataatcca cccgcctcg 60
tgctggatt acaggcgtga gccaccgcgc ccgg 94

<210> 49
<211> 299
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> (190)..(202)
<223> Wherein Xaa is any amino acid.

<400> 49

Thr	Leu	Ile	Thr	Asp	Phe	Val	Phe	Gln	Gly	Phe	Ser	Ser	Phe	His	Glu
1								10						15	

Gln Gln Ile Thr Leu Phe Gly Val Phe Leu Ala Leu Tyr Ile Leu Thr

20				25			30								
----	--	--	--	----	--	--	----	--	--	--	--	--	--	--	--

Leu Ala Gly Asn Ile Ile Ile Val Thr Ile Ile Arg Ile Asp Leu His

35				40			45								
----	--	--	--	----	--	--	----	--	--	--	--	--	--	--	--

Leu His Thr Pro Met Tyr Phe Phe Leu Ser Met Leu Ser Thr Ser Glu

50				55			60								
----	--	--	--	----	--	--	----	--	--	--	--	--	--	--	--

Thr Val Tyr Thr Leu Val Ile Leu Pro Arg Met Leu Ser Ser Leu Val

65				70			75				80	•			
----	--	--	--	----	--	--	----	--	--	--	----	---	--	--	--

Gly Met Ser Gln Pro Met Ser Leu Ala Gly Cys Ala Thr Gln Met Phe

85				90			95								
----	--	--	--	----	--	--	----	--	--	--	--	--	--	--	--

Phe Phe Val Thr Phe Gly Ile Thr Asn Cys Phe Leu Leu Thr Ala Met

100				105			110								
-----	--	--	--	-----	--	--	-----	--	--	--	--	--	--	--	--

Gly Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Met Val

115				120			125								
-----	--	--	--	-----	--	--	-----	--	--	--	--	--	--	--	--

Ile Met Asn Lys Arg Leu Arg Ile Gln Leu Val Leu Gly Ala Cys Ser

130				135			140								
-----	--	--	--	-----	--	--	-----	--	--	--	--	--	--	--	--

Ile Gly Leu Ile Val Ala Ile Thr Gln Val Thr Ser Val Phe Arg Leu

145				150			155				160				
-----	--	--	--	-----	--	--	-----	--	--	--	-----	--	--	--	--

Pro Phe Cys Ala Arg Lys Val Pro His Phe Phe Cys Asp Ile Arg Pro

165				170			175								
-----	--	--	--	-----	--	--	-----	--	--	--	--	--	--	--	--

Val Met Lys Leu Ser Cys Ile Asp Thr Thr Val Asn Glu Xaa Xaa Xaa
180 185 190

Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Xaa Pro Met Gly Leu Val Phe
195 200 205

Ile Ser Tyr Val Leu Ile Ile Ser Thr Ile Leu Lys Ile Ala Ser Val
210 215 220

Glu Gly Arg Lys Lys Ala Phe Ala Thr Cys Ala Ser His Leu Thr Val
225 230 235 240

Val Ile Val His Tyr Ser Cys Ala Ser Ile Ala Tyr Leu Lys Pro Lys
245 250 255

Ser Glu Asn Thr Arg Glu His Asp Gln Leu Ile Ser Val Thr Tyr Thr
260 265 270

Val Ile Thr Pro Leu Leu Asn Pro Val Val Tyr Thr Leu Arg Asn Lys
275 280 285

Glu Val Lys Asp Ala Leu Cys Arg Ala Val Gly
290 295

<210> 50

<211> 299

<212> PRT

<213> Homo sapiens

<400> 50

Thr Val Val Thr Gln Phe Ile Leu Val Gly Phe Ser Ser Leu Gly Glu
1 5 10 15

Leu Gln Leu Leu Leu Phe Val Ile Phe Leu Leu Leu Tyr Leu Thr Ile
20 25 30

Leu Val Ala Asn Val Thr Ile Met Ala Val Ile Arg Phe Ser Trp Thr
35 40 45

Leu His Thr Pro Met Tyr Gly Phe Leu Phe Ile Leu Ser Phe Ser Glu
50 55 60

Ser Cys Tyr Thr Phe Val Ile Ile Pro Gln Leu Leu Val His Leu Leu
65 70 75 80

Ser Asp Thr Lys Thr Ile Ser Leu Met Ala Cys Ala Thr Gln Leu Phe
85 90 95

Phe Phe Leu Gly Phe Ala Cys Thr Asn Cys Leu Leu Ile Ala Val Met
100 105 110

Gly Tyr Asp Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Thr Leu
115 120 125

Ile Ile Asn Lys Arg Leu Gly Leu Glu Leu Ile Ser Leu Ser Gly Ala
130 135 140

Thr Gly Phe Phe Ile Ala Leu Val Ala Thr Asn Leu Ile Cys Asp Met
145 150 155 160

Arg Phe Cys Gly Pro Asn Arg Val Asn His Tyr Phe Cys Asp Met Ala
165 170 175

Pro Val Ile Lys Leu Ala Cys Thr Asp Thr His Val Lys Glu Leu Ala
180 185 190

Leu Phe Ser Leu Ser Ile Leu Val Ile Met Val Pro Phe Leu Leu Ile
195 200 205

Leu Ile Ser Tyr Gly Phe Ile Val Asn Thr Ile Leu Lys Ile Pro Ser
210 215 220

Ala Glu Gly Lys Lys Ala Phe Val Thr Cys Ala Ser His Leu Thr Val
225 230 235 240

Val Phe Val His Tyr Asp Cys Ala Ser Ile Ile Tyr Leu Arg Pro Lys
245 250 255

Ser Lys Ser Ala Ser Asp Lys Asp Gln Leu Val Ala Val Thr Tyr Ala
260 265 270

Val Val Thr Pro Leu Leu Asn Pro Leu Val Tyr Ser Leu Arg Asn Lys
275 280 285

Glu Val Lys Thr Ala Leu Lys Arg Val Leu Gly
290 295

<210> 51
<211> 187
<212> PRT
<213> Homo sapiens

<400> 51
Asn Val Thr Ile Met Ala Val Ile Arg Phe Ser Trp Thr Leu His Thr

1	5	10	15
Pro Met Tyr Gly Phe Leu Phe Ile Leu Ser Phe Ser Glu Ser Cys Tyr			
20	25	30	
Thr Phe Val Ile Ile Pro Gln Leu Leu Val His Leu Leu Ser Asp Thr			
35	40	45	
Lys Thr Ile Ser Leu Met Ala Cys Ala Thr Gln Leu Phe Phe Leu			
50	55	60	
Gly Phe Ala Cys Thr Asn Cys Leu Leu Ile Ala Val Met Gly Tyr Asp			
65	70	75	80
Arg Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Thr Leu Ile Ile Asn			
85	90	95	
Lys Arg Leu Gly Leu Glu Leu Ile Ser Leu Ser Gly Ala Thr Gly Phe			
100	105	110	
Phe Ile Ala Leu Val Ala Thr Asn Leu Ile Cys Asp Met Arg Phe Cys			
115	120	125	
Gly Pro Asn Arg Val Asn His Tyr Phe Cys Asp Met Ala Pro Val Ile			
130	135	140	
Lys Leu Ala Cys Thr Asp Thr His Val Lys Glu Leu Ala Leu Phe Ser			
145	150	155	160
Leu Ser Ile Leu Val Ile Met Val Pro Phe Leu Leu Ile Leu Ile Ser			
165	170	175	
Tyr Gly Phe Ile Val Asn Thr Ile Leu Lys Ile			
180	185		

<210> 52
 <211> 94
 <212> DNA
 <213> Homo sapiens

<400> 52
 gttagccagg atggctctcaa tctcctgacc tcgtgatccg cctgccttgg cctcccaaag 60
 tgctgggatt acaggcatga gccactgcgc ccgg 94

<210> 53
 <211> 788

<212> DNA

<213> Homo sapiens

<400> 53

cacaccccca tgtgcttctt cctctccaaa ctgtgctcag ctgacatcgg tttcacctg 60
gccatggttc ccaagatgat tgtgaacatg cagtcgcata gcagagtcat ctcttatgag 120
ggctgcctga cacggatgtc tttcttgc tttttgcgt gtatggaaga catgctcctg 180
actgtatgg cctatgactg cttttagcc atctgtcgcc ctctgcacta cccagtcac 240
gtgaatcctc acctctgtgt ctcttcgtc ttgggtgtcct tttccttag cccgttggat 300
tcccagctgc acagttggat tgtgttacta ttaccatca tcaagaatgt ggaaatact 360
aattttgtct gtgaaccctc tcaacttctc aaccttgctt gttctgacag cgtcatcaat 420
aacatattca tatatttcga tagtactatg tttggtttc ttcccatttc agggatcctt 480
ttgtcttact ataaaattgt cccctccatt ctaaggatgt catggtcaga tggaaagtat 540
aaaggcttct ccacctgtgg ctcttacctg gcagttgttt gctcatttga tggaaacaggc 600
attggcatgt acctgacttc agctgtgtca ccacccccc ggaatgggt gtggcggtca 660
gtgatgtatg ctgtggtcac cccatgctg aacctttca tctacagcct aggaaagagg 720
gatatacataaa gtgtcctgctg gaggctgtgc agcagaacag tcgaatctca tggatgttc 780
catccttt 788

<210> 54

<211> 788

<212> DNA

<213> Homo sapiens

<400> 54

cacaccccca tgtgcttctt cctctccaaac ctgtgctggg ctgacatcgg tttcacctg 60
gccacggttc ctaagatgat tgtggacatg cagtcctata ccagagtcat ctcttatgag 120
ggctgcctga cacggatatc tttcttggc tttttgcgt gtatgaaaga catgctcctg 180
actgtatgg cctatgactg cttttagcc atctgtcgcc ctctgcacta cccagtcac 240
gtgaatcctc acctctgtgt ctcttcctt ttggtataact tttccttag ctgttggat 300
tcccagctgc acagttggat tgtgttacaa ttaccatca tcaagaatgt ggaaatctt 360
aattttgtct gtgacccttc tcaacttctc aaacttgctt gttctgacag cgtcatcaat 420
agcatattca tgtatattcca tagtactatg tttggtttc ttcccatttc agggatcctt 480
ttgtcttact ataaaatcgt cccctccatt ctaaggattt catcatcaga tggaaagtat 540
aaagccttct ccacctgtgg ctctcacttg gcagttgttt gctgattttt tggaaacaggc 600
attggcggt acctgacttc agctgtgtca ccacccccc ggaatgggt gtagcggtca 660
gtgatgtacg ctgtggtcac cccatgctg aacctttca tctacagcct gagaaacagg 720
gacatacataaa gtgccctgctg gaggctgtc agcagaacag tcgaatctca tggatgttc 780
catccttt 788

<210> 55

<211> 265

<212> PRT

<213> Homo sapiens

<400> 55

Pro	Met	Cys	Phe	Phe	Leu	Ser	Lys	Leu	Cys	Ser	Ala	Asp	Ile	Gly	Phe
1			5			10								15	
Thr	Leu	Ala	Met	Val	Pro	Lys	Met	Ile	Val	Asn	Met	Gln	Ser	His	Ser
	20				25									30	
Arg	Val	Ile	Ser	Tyr	Glu	Gly	Cys	Leu	Thr	Arg	Met	Ser	Phe	Phe	Val
	35				40									45	
Leu	Phe	Ala	Cys	Met	Glu	Asp	Met	Leu	Leu	Thr	Val	Met	Ala	Tyr	Asp
	50			55										60	
Cys	Phe	Val	Ala	Ile	Cys	Arg	Pro	Leu	His	Tyr	Pro	Val	Ile	Val	Asn
	65				70				75					80	
Pro	His	Leu	Cys	Val	Phe	Phe	Val	Leu	Val	Ser	Phe	Phe	Leu	Ser	Pro
				85				90						95	
Leu	Asp	Ser	Gln	Leu	His	Ser	Trp	Ile	Val	Leu	Leu	Phe	Thr	Ile	Ile
				100				105						110	
Lys	Asn	Val	Glu	Ile	Thr	Asn	Phe	Val	Cys	Glu	Pro	Ser	Gln	Leu	Leu
				115			120							125	
Asn	Leu	Ala	Cys	Ser	Asp	Ser	Val	Ile	Asn	Asn	Ile	Phe	Ile	Tyr	Phe
				130			135							140	
Asp	Ser	Thr	Met	Phe	Gly	Phe	Leu	Pro	Ile	Ser	Gly	Ile	Leu	Leu	Ser
			145		150				155					160	
Tyr	Tyr	Lys	Ile	Val	Pro	Ser	Ile	Leu	Arg	Met	Ser	Ser	Ser	Asp	Gly
				165				170						175	
Lys	Tyr	Lys	Gly	Phe	Ser	Thr	Cys	Gly	Ser	Tyr	Leu	Ala	Val	Val	Cys
				180				185						190	
Ser	Phe	Asp	Gly	Thr	Gly	Ile	Gly	Met	Tyr	Leu	Thr	Ser	Ala	Val	Ser
				195			200							205	
Pro	Pro	Pro	Arg	Asn	Gly	Val	Val	Ala	Ser	Val	Met	Tyr	Ala	Val	Val
				210			215				220				
Thr	Pro	Met	Leu	Asn	Leu	Phe	Ile	Tyr	Ser	Leu	Gly	Lys	Arg	Asp	Ile
			225			230			235					240	
Gln	Ser	Val	Leu	Arg	Arg	Leu	Cys	Ser	Arg	Thr	Val	Glu	Ser	His	Asp
				245				250						255	

Met Phe His Pro Phe Ser Cys Val Gly

260

265

<210> 56

<211> 264

<212> PRT

<213> Homo sapiens

<400> 56

Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Leu Ala Asp Ile Gly Phe

1

5

10

15

Thr Ser Thr Thr Val Pro Lys Met Ile Val Asp Met Gln Thr His Ser

20

25

30

Arg Val Ile Ser Tyr Glu Gly Cys Leu Thr Gln Met Ser Phe Phe Val

35

40

45

Leu Phe Ala Cys Met Asp Asp Met Leu Leu Ser Val Met Ala Tyr Asp

50

55

60

Arg Phe Val Ala Ile Cys His Pro Leu His Tyr Arg Ile Ile Met Asn

65

70

75

80

Pro Arg Leu Cys Gly Phe Leu Ile Leu Leu Ser Phe Phe Ile Ser Leu

85

90

95

Leu Asp Ser Gln Leu His Asn Leu Ile Met Leu Gln Leu Thr Cys Phe

100

105

110

Lys Asp Val Asp Ile Ser Asn Phe Phe Cys Asp Pro Ser Gln Leu Leu

115

120

125

His Leu Arg Cys Ser Asp Thr Phe Ile Asn Glu Met Val Ile Tyr Phe

130

135

140

Met Gly Ala Ile Phe Gly Cys Leu Pro Ile Ser Gly Ile Leu Phe Ser

145

150

155

160

Tyr Tyr Lys Ile Val Ser Pro Ile Leu Arg Val Pro Thr Ser Asp Gly

165

170

175

Lys Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ala Val Val Cys

180

185

190

Leu Phe Tyr Gly Thr Gly Leu Val Gly Tyr Leu Ser Ser Ala Val Leu

195

200

205

Pro Ser Pro Arg Lys Ser Met Val Ala Ser Val Met Tyr Thr Val Val
210 215 220

Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Ile
225 230 235 240

Gln Ser Ala Leu Cys Arg Leu His Gly Arg Ile Ile Lys Ser His His
245 250 255

Leu His Pro Phe Cys Tyr Met Gly
260

<210> 57

<211> 82

<212> PRT

<213> Homo sapiens

<400> 57

Pro Met Cys Phe Phe Leu Ser Lys Leu Cys Ser Ala Asp Ile Gly Phe
1 5 10 15

Thr Leu Ala Met Val Pro Lys Met Ile Val Asn Met Gln Ser His Ser
20 25 30

Arg Val Ile Ser Tyr Glu Gly Cys Leu Thr Arg Met Ser Phe Phe Val
35 40 45

Leu Phe Ala Cys Met Glu Asp Met Leu Leu Thr Val Met Ala Tyr Asp
50 55 60

Cys Phe Val Ala Ile Cys Arg Pro Leu His Tyr Pro Val Ile Val Asn
65 70 75 80

Pro His

<210> 58

<211> 82

<212> PRT

<213> Homo sapiens

<400> 58

Thr Thr Asn Tyr Leu Ile Val Ser Leu Ala Val Ala Asp Leu Leu Val
1 5 10 15

Ala Thr Leu Val Met Pro Trp Val Val Tyr Leu Glu Val Val Gly Glu
20 25 30

Trp Lys Phe Ser Arg Ile His Cys Asp Ile Phe Val Thr Leu Asp Val
35 40 45

Met Met Cys Thr Ala Ser Ile Leu Asn Leu Cys Ala Ile Ser Ile Asp
50 55 60

Arg Tyr Thr Ala Val Ala Met Pro Met Leu Tyr Asn Thr Arg Tyr Ser
65 70 75 80

Ser Lys

<210> 59

<211> 866

<212> DNA

<213> Homo sapiens

<400> 59

ctgtccctgt ccatgtatat ggtcacggtg ctgaggaacc tgctcagcat cctggctgtc 60
agctctgact ccccgctcca caccccccattg tgcttcttcc tctccaaact gtgctcagct 120
gacatcggtt tcaccttggc catggttccc aagatgattg tgaacatgca gtcgcatacg 180
agagtcatct cttatgaggg ctgcctgaca cggatgtctt tctttgtcct ttttgcattgt 240
atgaaagaca tgctcctgac tgtgatggcc tatgactgct ttgtagccat ctgtcgccct 300
ctgcactacc cagtcatcgtaatcctcac ctctgtgtct tcttcgtctt ggtgtccctt 360
ttccttagcc cggtggattc ccagctgcac agttggattg ttttgcattt caccatcatc 420
aagaatgtgg aaatcactaa ttttgcattgtt gaaccctctc aacttctcaa ctttgcattgt 480
tctgacagcg tcataataa catattcata tatttcgata gtactatgtt tggttttctt 540
cccatttcag ggatcctttt gtcttactat aaaattgtcc cttccattct aaggatgtca 600
tcgtcagatg ggaagtataa aggcttctcc acctgtggct cttacctggc agttgtttgc 660
tcatttgcattgtt gaaacaggcat tggcatgtac ctgacttcag ctgtgtcacc accccccagg 720
aatgggtgtgg tggcgtagt gatgtatgct gtggtcaccc ccatgctgaa ccttttcata 780
ctcagcctgg gaaagaggga tatacaaagt gtcctgcgga ggctgtgcag cagaacagtc 840
gaatctcatg atatgttcca tccttt 866

<210> 60

<211> 866

<212> DNA

<213> Homo sapiens

<400> 60

ctgtccctgt ccatgtatct ggtcacggtg ctgaggaacc tgctcatcat cctggctgtc 60
agctctgacc cccacctcca caccccccattg tgcttcttcc tctccaaacct gtgctgggct 120
gacatcggtt tcaccttggc cacggttccct aagatgattg tggacatgca gtctcataacc 180

agagtcatct cttatgaggg ctgcctgaca cggatatctt tcttggtcct ttttgcgt 240
atagaagaca tgctcctgac tgtgatggcc tatgactgct ttgttagccat ctgtcgccct 300
ctgcactacc cagtcatcgtaaatcctcac ctctgtgtct tcttcctttt ggtataacttt 360
ttccttagct tggatccagctgcac agttggattt gttacaatt caccatcatc 420
aagaatgtgg aaatctctaa tttgtctgt gaccctctc aacttctcaa acttgcctgt 480
tctgacagcg tcatcaatag catattcatg tatttccata gtactatgtt tggtttctt 540
cccatttcag ggatcctttt gtcttactat aaaatcgccctccattct aaggatttca 600
tcatcagatg ggaagtataa agccttctcc acctgtggct ctcacttggc agttgttgc 660
tgatTTATG gaacaggcat tggcgtgtac ctgacttcag ctgtgtcacc accccccagg 720
aatggtgtgg tagcgtcagt gatgtacgct gtggtcaccc ccatgctgaa ccttttcatc 780
tacagcctga gaaacaggga catacaaagt gcctgcgga ggctgctcag cagaacagtc 840
gaatctcatg atctgttcca tccttt 866

<210> 61

<211> 265

<212> PRT

<213> Homo sapiens

<400> 61

Pro Met Cys Phe Phe Leu Ser Lys Leu Cys Ser Ala Asp Ile Gly Phe
1 5 10 15

Thr Leu Ala Met Val Pro Lys Met Ile Val Asn Met Gln Ser His Ser
20 25 30

Arg Val Ile Ser Tyr Glu Gly Cys Leu Thr Arg Met Ser Phe Phe Val
35 40 45

Leu Phe Ala Cys Met Glu Asp Met Leu Leu Thr Val Met Ala Tyr Asp
50 55 60

Cys Phe Val Ala Ile Cys Arg Pro Leu His Tyr Pro Val Ile Val Asn
65 70 75 80

Pro His Leu Cys Val Phe Phe Val Leu Val Ser Phe Phe Leu Ser Pro
85 90 95

Leu Asp Ser Gln Leu His Ser Trp Ile Val Leu Leu Phe Thr Ile Ile
100 105 110

Lys Asn Val Glu Ile Thr Asn Phe Val Cys Glu Pro Ser Gln Leu Leu
115 120 125

Asn Leu Ala Cys Ser Asp Ser Val Ile Asn Asn Ile Phe Ile Tyr Phe
130 135 140

Asp Ser Thr Met Phe Gly Phe Leu Pro Ile Ser Gly Ile Leu Leu Ser

145 150 155 160

Tyr Tyr Lys Ile Val Pro Ser Ile Leu Arg Met Ser Ser Ser Asp Gly
165 170 175

Lys Tyr Lys Gly Phe Ser Thr Cys Gly Ser Tyr Leu Ala Val Val Cys
180 185 190

Ser Phe Asp Gly Thr Gly Ile Gly Met Tyr Leu Thr Ser Ala Val Ser
195 200 205

Pro Pro Pro Arg Asn Gly Val Val Ala Ser Val Met Tyr Ala Val Val
210 215 220

Thr Pro Met Leu Asn Leu Phe Ile Tyr Ser Leu Gly Lys Arg Asp Ile
225 230 235 240

Gln Ser Val Leu Arg Arg Leu Cys Ser Arg Thr Val Glu Ser His Asp
245 250 255

Met Phe His Pro Phe Ser Cys Val Gly
260 265

<210> 62

<211> 264

<212> PRT

<213> Homo sapiens

<400> 62

Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Leu Ala Asp Ile Gly Phe
1 5 10 15

Thr Ser Thr Thr Val Pro Lys Met Ile Val Asp Met Gln Thr His Ser
20 25 30

Arg Val Ile Ser Tyr Glu Gly Cys Leu Thr Gln Met Ser Phe Phe Val
35 40 45

Leu Phe Ala Cys Met Asp Asp Met Leu Leu Ser Val Met Ala Tyr Asp
50 55 60

Arg Phe Val Ala Ile Cys His Pro Leu His Tyr Arg Ile Ile Met Asn
65 70 75 80

Pro Arg Leu Cys Gly Phe Leu Ile Leu Leu Ser Phe Phe Ile Ser Leu
85 90 95

Leu Asp Ser Gln Leu His Asn Leu Ile Met Leu Gln Leu Thr Cys Phe
100 105 110

Lys Asp Val Asp Ile Ser Asn Phe Phe Cys Asp Pro Ser Gln Leu Leu
115 120 125

His Leu Arg Cys Ser Asp Thr Phe Ile Asn Glu Met Val Ile Tyr Phe
130 135 140

Met Gly Ala Ile Phe Gly Cys Leu Pro Ile Ser Gly Ile Leu Phe Ser
145 150 155 160

Tyr Tyr Lys Ile Val Ser Pro Ile Leu Arg Val Pro Thr Ser Asp Gly
165 170 175

Lys Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ala Val Val Cys
180 185 190

Leu Phe Tyr Gly Thr Gly Leu Val Gly Tyr Leu Ser Ser Ala Val Leu
195 200 205

Pro Ser Pro Arg Lys Ser Met Val Ala Ser Val Met Tyr Thr Val Val
210 215 220

Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Ile
225 230 235 240

Gln Ser Ala Leu Cys Arg Leu His Gly Arg Ile Ile Lys Ser His His
245 250 255

Leu His Pro Phe Cys Tyr Met Gly
260

<210> 63
<211> 264
<212> PRT
<213> Homo sapiens

<220>
<221> VARIANT
<222> (85)..(99)
<223> Wherein Xaa is any amino acid.

<400> 63
Pro Met Cys Phe Phe Leu Ser Lys Leu Cys Ser Ala Asp Ile Gly Phe
1 5 10 15

Thr Leu Ala Met Val Pro Lys Met Ile Val Asn Met Gln Ser His Ser
 20 25 30

Arg Val Ile Ser Tyr Glu Gly Cys Leu Thr Arg Met Ser Phe Phe Val
 35 40 45

Leu Phe Ala Cys Met Glu Asp Met Leu Leu Thr Val Met Ala Tyr Asp
 50 55 60

Cys Phe Val Ala Ile Cys Arg Pro Leu His Tyr Pro Val Ile Val Asn
 65 70 75 80

Pro His Leu Cys Xaa
 85 90 95

Xaa Xaa Xaa Gln Leu His Ser Trp Ile Val Leu Leu Phe Thr Ile Ile
 100 105 110

Lys Asn Val Glu Ile Thr Asn Phe Val Cys Glu Pro Ser Gln Leu Leu
 115 120 125

Asn Leu Ala Cys Ser Asp Ser Val Ile Asn Asn Ile Phe Ile Tyr Phe
 130 135 140

Asp Ser Thr Met Phe Gly Phe Leu Pro Ile Ser Gly Ile Leu Leu Ser
 145 150 155 160

Tyr Tyr Lys Ile Val Pro Ser Ile Leu Arg Met Ser Ser Ser Asp Gly
 165 170 175

Lys Tyr Lys Gly Phe Ser Thr Cys Gly Ser Tyr Leu Ala Val Val Cys
 180 185 190

Ser Phe Asp Gly Thr Gly Ile Gly Met Tyr Leu Thr Ser Ala Val Ser
 195 200 205

Pro Pro Pro Arg Asn Gly Val Ala Ser Val Met Tyr Ala Val Val Thr
 210 215 220

Pro Met Leu Asn Leu Phe Ile Leu Ser Leu Gly Lys Arg Asp Ile Gln
 225 230 235 240

Ser Val Leu Arg Arg Leu Cys Ser Arg Thr Val Glu Ser His Asp Met
 245 250 255

Phe His Pro Phe Ser Cys Val Gly
 260

<210> 64
<211> 310
<212> PRT
<213> Homo sapiens

<400> 64

Met Gly Asp Asn Ile Thr Ser Ile Thr Glu Phe Leu Leu Leu Gly Phe
1 5 10 15

Pro Val Gly Pro Arg Ile Gln Met Leu Leu Phe Gly Leu Phe Ser Leu
20 25 30

Phe Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr Ile Leu Gly Leu Ile
35 40 45

Ser Leu Asp Ser Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His
50 55 60

Leu Ala Val Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met
65 70 75 80

Leu Val Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg
85 90 95

Met Met Gln Thr Phe Leu Phe Ser Thr Phe Ala Val Thr Glu Cys Leu
100 105 110

Leu Leu Val Val Met Ser Tyr Asp Leu Tyr Val Ala Ile Cys His Pro
115 120 125

Leu Arg Tyr Leu Ala Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala
130 135 140

Val Thr Ser Trp Thr Thr Gly Val Leu Leu Ser Leu Ile His Leu Val
145 150 155 160

Leu Leu Leu Pro Leu Pro Phe Cys Arg Pro Gln Lys Ile Tyr His Phe
165 170 175

Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr His
180 185 190

Ile Asn Glu Asn Met Val Leu Ala Gly Ala Ile Ser Gly Leu Val Gly
195 200 205

Pro Leu Ser Thr Ile Val Val Ser Tyr Met Cys Ile Leu Cys Ala Ile
210 215 220

Leu Gln Ile Gln Ser Arg Glu Val Gln Arg Lys Ala Phe Cys Thr Cys
225 230 235 240

Phe Ser His Leu Cys Val Ile Gly Leu Phe Tyr Gly Thr Ala Ile Ile
245 250 255

Met Tyr Val Gly Pro Arg Tyr Gly Asn Pro Lys Glu Gln Lys Lys Tyr
260 265 270

Leu Leu Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
275 280 285

Cys Ser Leu Arg Asn Ser Glu Val Lys Asn Thr Leu Lys Arg Val Leu
290 295 300

Gly Val Glu Arg Ala Leu
305 310

<210> 65

<211> 190

<212> PRT

<213> Homo sapiens

<400> 65

Asn Leu Leu Ser Ile Leu Ala Val Ser Ser Asp Ser Pro Leu His Thr
1 5 10 15

Pro Met Cys Phe Phe Leu Ser Lys Leu Cys Ser Ala Asp Ile Gly Phe
20 25 30

Thr Leu Ala Met Val Pro Lys Met Ile Val Asn Met Gln Ser His Ser
35 40 45

Arg Val Ile Ser Tyr Glu Gly Cys Leu Thr Arg Met Ser Phe Phe Val
50 55 60

Leu Phe Ala Cys Met Glu Asp Met Leu Leu Thr Val Met Ala Tyr Asp
65 70 75 80

Cys Phe Val Ala Ile Cys Arg Pro Leu His Tyr Pro Val Ile Val Asn
85 90 95

Pro His Leu Cys Val Phe Phe Val Leu Val Ser Phe Phe Leu Ser Pro
100 105 110

Leu Asp Ser Gln Leu His Ser Trp Ile Val Leu Leu Phe Thr Ile Ile

115	120	125
Lys Asn Val Glu Ile Thr Asn Phe Val Cys Glu Pro Ser Gln Leu Leu		
130	135	140
Asn Leu Ala Cys Ser Asp Ser Val Ile Asn Asn Ile Phe Ile Tyr Phe		
145	150	155
Asp Ser Thr Met Phe Gly Phe Leu Pro Ile Ser Gly Ile Leu Leu Ser		
165	170	175
Tyr Tyr Lys Ile Val Pro Ser Ile Leu Arg Met Ser Ser Ser		
180	185	190
<210> 66		
<211> 171		
<212> PRT		
<213> Homo sapiens		
<400> 66		
Asn Val Leu Val Cys Met Ala Val Ser Arg Glu Lys Ala Leu Gln Thr		
1	5	10
15		
Thr Thr Asn Tyr Leu Ile Val Ser Leu Ala Val Ala Asp Leu Leu Val		
20	25	30
Ala Thr Leu Val Met Pro Trp Val Val Tyr Leu Glu Val Val Gly Glu		
35	40	45
Trp Lys Phe Ser Arg Ile His Cys Asp Ile Phe Val Thr Leu Asp Val		
50	55	60
Met Met Cys Thr Ala Ser Ile Leu Asn Leu Cys Ala Ile Ser Ile Asp		
65	70	75
80		
Arg Tyr Thr Ala Val Ala Met Pro Met Leu Tyr Asn Thr Arg Tyr Ser		
85	90	95
Ser Lys Arg Arg Val Thr Val Met Ile Ala Ile Val Trp Val Leu Ser		
100	105	110
Phe Thr Ile Ser Cys Pro Met Leu Phe Gly Leu Asn Asn Thr Asp Gln		
115	120	125
Asn Glu Cys Ile Ile Ala Asn Pro Ala Phe Val Val Tyr Ser Ser Ile		
130	135	140

Val	Ser	Phe	Tyr	Val	Pro	Phe	Ile	Val	Thr	Leu	Leu	Val	Tyr	Ile	Lys
145				150				155					160		
Ile Tyr Ile Val Leu Arg Arg Arg Arg Lys Arg															
			165				170								
<210> 67															
<211> 310															
<212> PRT															
<213> Homo sapiens															
<400> 67															
Met	Gly	Asp	Asn	Ile	Thr	Ser	Ile	Arg	Glu	Phe	Leu	Leu	Leu	Gly	Phe
1				5			10						15		
Pro Val Gly Pro Arg Ile Gln Met Leu Leu Phe Gly Leu Phe Ser Leu															
			20			25					30				
Phe Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr Ile Leu Gly Leu Ile															
			35			40					45				
Ser Leu Asp Ser Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His															
			50			55					60				
Leu Ala Val Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met															
			65			70					75			80	
Leu Val Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg															
			85			90					95				
Met Met Gln Thr Phe Leu Phe Ser Thr Phe Ala Val Thr Glu Cys Leu															
			100			105					110				
Leu Leu Val Val Met Ser Tyr Asp Leu Tyr Val Ala Ile Cys His Pro															
			115			120					125				
Leu Arg Tyr Leu Ala Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala															
			130			135					140				
Val Thr Ser Trp Thr Thr Gly Val Leu Leu Ser Leu Ile His Leu Val															
			145			150					155			160	
Leu Leu Leu Pro Leu Pro Phe Cys Arg Pro Gln Lys Ile Tyr His Phe															
			165			170					175				
Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr His															
			180			185					190				

Ile Asn Glu Asn Met Val Leu Ala Gly Ala Ile Ser Gly Leu Val Gly
195 200 205

Pro Leu Ser Thr Ile Val Val Ser Tyr Met Cys Ile Leu Cys Ala Ile
210 215 220

Leu Gln Ile Gln Ser Arg Glu Val Gln Arg Lys Ala Phe Arg Thr Cys
225 230 235 240

Phe Ser His Leu Cys Val Ile Gly Leu Val Tyr Gly Thr Ala Ile Ile
245 250 255

Met Tyr Val Gly Pro Arg Tyr Gly Asn Pro Lys Glu Gln Lys Lys Tyr
260 265 270

Leu Leu Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
275 280 285

Cys Ser Leu Arg Asn Ser Glu Val Lys Asn Thr Leu Lys Arg Val Leu
290 295 300

Gly Val Glu Arg Ala Leu
305 310

<210> 68

<211> 930

<212> DNA

<213> Homo sapiens

<400> 68

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tccagaactg cagtcggtcc tcgctttgtc gtccctgtcc ctgtccctga atctggtcac 120
ggtgctgagg aacctgctca gcattcctggc tgtcagctct gactcccccc tccacacccc 180
catgtacttc ttcctctcca acctgtgctg ggctgacatc ggtctcacct cggccacgg 240
tcccaaggtg attctggata tgcagtcgca tagcagagtc atctctcatg tgggctgcct 300
gacacagatg tcttcttgg tccttttgc atgtatagaa ggcatgctcc tgactgtgat 360
ggcctatggc tgctttag ccattgtcg ccctctgcac taccctgtca tagtgaatcc 420
tcacctctgt gtcttcttcg tttgggtgtc cttttccctt aacctgttgg attcccgact 480
gcacagttgg attgtgttac aattcaccat catcaagaat gtggaaatct ctaattttt 540
ctgtgacccc tctcagcttc tcaaccttgc ctgttctgac agcgtcatca atagcatatt 600
catatatttc gatagtacta tgtttggttt tcttcccatt tcagggatcc ttttgtctta 660
ctataaaaatt gtcccctcca ttcttaaggat gtcattgtca gatggaaagt ataaagcctt 720
ctccacctat ggctctcacc taggagttgt ttgctggttt tatggaacag tcattggcat 780
gtacctggct tcagccgtgt caccacccca caggaatggt gtggtggcat cagtgtatgt 840
ggctgtggtc acccccatgc tgaacctttt catctacagc ctgagaaaca gggacataca 900
aagtgccctg cggaggctgc gcagcagaac 930

<210> 69
<211> 249
<212> PRT
<213> Homo sapiens

<400> 69
Pro Thr Tyr Phe Phe Leu Ser Ile Leu Cys Trp Ala Asp Ile Gly Phe
1 5 10 15
Thr Ser Ala Thr Val Pro Lys Met Ile Val Asp Met Gln Trp Tyr Ser
20 25 30
Arg Val Ile Ser His Ala Gly Cys Leu Thr Gln Met Ser Phe Leu Val
35 40 45
Leu Phe Ala Cys Ile Glu Gly Met Leu Leu Thr Val Met Ala Tyr Asp
50 55 60
Cys Phe Val Gly Ile Tyr Arg Pro Leu His Tyr Pro Val Ile Val Asn
65 70 75 80
Pro His Leu Cys Val Phe Phe Val Leu Val Ser Phe Phe Leu Ser Leu
85 90 95
Leu Asp Ser Gln Leu His Ser Trp Ile Val Leu Gln Phe Thr Ile Ile
100 105 110
Lys Asn Val Glu Ile Ser Asn Phe Val Cys Asp Pro Ser Gln Leu Leu
115 120 125
Lys Leu Ala Ser Tyr Asp Ser Val Ile Asn Ser Ile Phe Ile Tyr Phe
130 135 140
Asp Ser Thr Met Phe Gly Phe Leu Pro Ile Ser Gly Ile Leu Ser Ser
145 150 155 160
Tyr Tyr Lys Ile Val Pro Ser Ile Leu Arg Met Ser Ser Ser Asp Gly
165 170 175
Lys Tyr Lys Thr Phe Ser Thr Tyr Gly Ser His Leu Ala Phe Val Cys
180 185 190
Ser Phe Tyr Gly Thr Gly Ile Asp Met Tyr Leu Ala Ser Ala Met Ser
195 200 205
Pro Thr Pro Arg Asn Gly Val Val Val Ser Val Met Ala Val Val Thr

210 215 220

Pro Met Leu Asn Leu Phe Ile Tyr Ser Leu Arg Asn Arg Asp Ile Gln
225 230 235 240

Ser Ala Leu Arg Arg Leu Arg Ser Arg
245

<210> 70

<211> 250

<212> PRT

<213> Homo sapiens

<400> 70

Pro Met Tyr Phe Phe Leu Ser Asn Leu Ser Leu Ala Asp Ile Gly Phe
1 5 10 15

Thr Ser Thr Thr Val Pro Lys Met Ile Val Asp Met Gln Thr His Ser
20 25 30

Arg Val Ile Ser Tyr Glu Gly Cys Leu Thr Gln Met Ser Phe Phe Val
35 40 45

Leu Phe Ala Cys Met Asp Asp Met Leu Leu Ser Val Met Ala Tyr Asp
50 55 60

Arg Phe Val Ala Ile Cys His Pro Leu His Tyr Arg Ile Ile Met Asn
65 70 75 80

Pro Arg Leu Cys Gly Phe Leu Ile Leu Leu Ser Phe Phe Ile Ser Leu
85 90 95

Leu Asp Ser Gln Leu His Asn Leu Ile Met Leu Gln Leu Thr Cys Phe
100 105 110

Lys Asp Val Asp Ile Ser Asn Phe Phe Cys Asp Pro Ser Gln Leu Leu
115 120 125

His Leu Arg Cys Ser Asp Thr Phe Ile Asn Glu Met Val Ile Tyr Phe
130 135 140

Met Gly Ala Ile Phe Gly Cys Leu Pro Ile Ser Gly Ile Leu Phe Ser
145 150 155 160

Tyr Tyr Lys Ile Val Ser Pro Ile Leu Arg Val Pro Thr Ser Asp Gly
165 170 175

Lys Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ala Val Val Cys
180 185 190

Leu Phe Tyr Gly Thr Gly Leu Val Gly Tyr Leu Ser Ser Ala Val Leu
195 200 205

Pro Ser Pro Arg Lys Ser Met Val Ala Ser Val Met Tyr Thr Val Val
210 215 220

Thr Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Ile
225 230 235 240

Gln Ser Ala Leu Cys Arg Leu His Gly Arg
245 250

<210> 71

<211> 98

<212> PRT

<213> Homo sapiens

<400> 71

Asn Leu Leu Ser Ile Pro Ala Val Ser Ser Asp Ser His Leu His Thr
1 5 10 15

Pro Thr Tyr Phe Phe Leu Ser Ile Leu Cys Trp Ala Asp Ile Gly Phe
20 25 30

Thr Ser Ala Thr Val Pro Lys Met Ile Val Asp Met Gln Trp Tyr Ser
35 40 45

Arg Val Ile Ser His Ala Gly Cys Leu Thr Gln Met Ser Phe Leu Val
50 55 60

Leu Phe Ala Cys Ile Glu Gly Met Leu Leu Thr Val Met Ala Tyr Asp
65 70 75 80

Cys Phe Val Gly Ile Tyr Arg Pro Leu His Tyr Pro Val Ile Val Asn
85 90 95

Pro His

<210> 72

<211> 98

<212> PRT

<213> Homo sapiens

<400> 72

Asn Val Leu Val Cys Met Ala Val Ser Arg Glu Lys Ala Leu Gln Thr
1 5 10 15

Thr Thr Asn Tyr Leu Ile Val Ser Leu Ala Val Ala Asp Leu Leu Val
20 25 30

Ala Thr Leu Val Met Pro Trp Val Val Tyr Leu Glu Val Val Gly Glu
35 40 45

Trp Lys Phe Ser Arg Ile His Cys Asp Ile Phe Val Thr Leu Asp Val
50 55 60

Met Met Cys Thr Ala Ser Ile Leu Asn Leu Cys Ala Ile Ser Ile Asp
65 70 75 80

Arg Tyr Thr Ala Val Ala Met Pro Met Leu Tyr Asn Thr Arg Tyr Ser
85 90 95

Ser Lys

<210> 73

<211> 305

<212> PRT

<213> Homo sapiens

<400> 73

Met Gly Asp Val Asn Gln Ser Val Ala Ser Asp Phe Ile Leu Val Gly
1 5 10 15

Leu Phe Ser His Ser Gly Ser Arg Gln Leu Leu Phe Ser Leu Val Ala
20 25 30

Val Met Phe Val Ile Gly Leu Leu Gly Asn Thr Val Leu Leu Phe Leu
35 40 45

Ile Arg Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser
50 55 60

Gln Leu Ser Leu Phe Asp Ile Gly Cys Pro Met Val Thr Ile Pro Lys
65 70 75 80

Met Ala Ser Asp Phe Leu Arg Gly Glu Gly Ala Thr Ser Tyr Gly Gly
85 90 95

Gly Ala Ala Gln Ile Phe Phe Leu Thr Leu Met Gly Val Ala Glu Gly
100 105 110

Val Leu Leu Val Leu Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Gln
115 120 125

Pro Leu Gln Tyr Pro Val Leu Met Arg Arg Gln Val Cys Leu Leu Met
130 135 140

Met Gly Ser Ser Trp Val Val Gly Val Leu Asn Ala Ser Ile Gln Thr
145 150 155 160

Ser Ile Thr Leu His Phe Pro Tyr Cys Ala Ser Arg Ile Val Asp His
165 170 175

Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Ala Asp Thr
180 185 190

Cys Ala Tyr Glu Met Ala Leu Ser Thr Ser Gly Val Leu Ile Leu Met
195 200 205

Leu Pro Leu Ser Leu Ile Ala Thr Ser Tyr Gly His Val Leu Gln Ala
210 215 220

Val Leu Ser Met Arg Ser Glu Glu Ala Arg His Lys Ala Val Thr Thr
225 230 235 240

Cys Ser Ser His Ile Thr Val Val Gly Leu Phe Tyr Gly Ala Ala Val
245 250 255

Phe Met Tyr Met Val Pro Cys Ala Tyr His Ser Pro Gln Gln Asp Asn
260 265 270

Val Val Ser Leu Phe Tyr Ser Leu Val Thr Pro Thr Leu Asn Pro Leu
275 280 285

Ile Tyr Ser Leu Arg Asn Pro Glu Val Trp Met Ala Leu Val Lys Val
290 295 300

Leu
305

<210> 74
<211> 305
<212> PRT
<213> Homo sapiens

<400> 74

Met Gly Thr Asp Asn Gln Thr Trp Val Ser Glu Phe Ile Leu Leu Gly
1 5 10 15

Leu Ser Ser Asp Trp Asp Thr Arg Val Ser Leu Phe Val Leu Phe Leu
20 25 30

Val Met Tyr Val Val Thr Val Leu Gly Asn Cys Leu Ile Val Leu Leu
35 40 45

Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
50 55 60

Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Val Val Pro Gln
65 70 75 80

Leu Leu Ala His Phe Leu Ala Glu His Lys Ala Ile Pro Phe Gln Ser
85 90 95

Cys Ala Ala Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu Phe
100 105 110

Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
115 120 125

Ala Leu Arg Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg Leu
130 135 140

Ala Ile Thr Ser Trp Val Ser Gly Phe Ile Ser Ser Pro Val Gln Thr
145 150 155 160

Ala Ile Thr Phe Gln Leu Pro Met Cys Arg Asn Lys Phe Ile Asp His
165 170 175

Ile Ser Cys Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr
180 185 190

Ser Ser Asn Glu Val Thr Ile Met Val Ser Ser Ile Val Leu Leu Met
195 200 205

Thr Pro Leu Cys Leu Val Leu Leu Ser Tyr Ile Gln Ile Ile Ser Thr
210 215 220

Ile Leu Lys Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His Thr
225 230 235 240

Cys Ala Ser His Leu Thr Val Val Ala Leu Cys Tyr Gly Val Ala Ile
245 250 255

Phe Thr Tyr Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys
260 265 270

Leu Phe Ser Val Phe Tyr Ala Ile Leu Thr Pro Met Leu Asn Pro Met
275 280 285

Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Trp Gln Lys Leu
290 295 300

Leu

305

<210> 75

<211> 305

<212> PRT

<213> Homo sapiens

<400> 75

Met Gly Asp Val Asn Gln Ser Val Ala Ser Asp Phe Ile Leu Val Gly
1 5 10 15

Leu Phe Ser His Ser Gly Ser Arg Gln Leu Leu Phe Ser Leu Val Ala
20 25 30

Val Met Phe Val Ile Gly Leu Leu Gly Asn Thr Val Leu Leu Phe Leu
35 40 45

Ile Arg Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser
50 55 60

Gln Leu Ser Leu Phe Asp Ile Gly Cys Pro Met Val Thr Ile Pro Lys
65 70 75 80

Met Ala Ser Asp Phe Leu Arg Gly Glu Gly Ala Thr Ser Tyr Gly Gly
85 90 95

Gly Ala Ala Gln Ile Phe Phe Leu Thr Leu Met Gly Val Ala Glu Gly
100 105 110

Val Leu Leu Val Leu Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Gln
115 120 125

Pro Leu Gln Tyr Pro Val Leu Met Arg Arg Gln Val Cys Leu Leu Met
130 135 140

Met Gly Ser Ser Trp Val Val Gly Val Leu Asn Ala Ser Ile Gln Thr

145	150	155	160
Ser Ile Thr Leu His Phe Pro Tyr Cys Ala Ser Arg Ile Val Asp His			
165	170	175	
Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Ala Asp Thr			
180	185	190	
Cys Ala Tyr Glu Met Ala Leu Ser Thr Ser Gly Val Leu Ile Leu Met			
195	200	205	
Leu Pro Leu Ser Leu Ile Ala Thr Ser Tyr Gly His Val Leu Gln Ala			
210	215	220	
Val Leu Ser Met Arg Ser Glu Glu Ala Arg His Lys Ala Val Thr Thr			
225	230	235	240
Cys Ser Ser His Ile Thr Val Val Gly Leu Phe Tyr Gly Ala Ala Val			
245	250	255	
Phe Met Tyr Met Val Pro Cys Ala Tyr His Ser Pro Gln Gln Asp Asn			
260	265	270	
Val Val Ser Leu Phe Tyr Ser Leu Val Thr Pro Thr Leu Asn Pro Leu			
275	280	285	
Ile Tyr Ser Leu Arg Asn Pro Glu Val Trp Met Ala Leu Val Lys Val			
290	295	300	
Leu			
305			

<210> 76
<211> 311
<212> PRT
<213> Homo sapiens

<400> 76
Met Gly Thr Asp Asn Gln Thr Trp Val Ser Glu Phe Ile Leu Leu Gly
1 5 10 15

Leu Ser Ser Asp Trp Asp Thr Arg Val Ser Leu Phe Val Leu Phe Leu
20 25 30

Val Met Tyr Val Val Thr Val Leu Gly Asn Cys Leu Ile Val Leu Leu
35 40 45

Ile	Arg	Leu	Asp	Ser	Arg	Leu	His	Thr	Pro	Met	Tyr	Phe	Phe	Leu	Thr	
50																60
Asn	Leu	Ser	Leu	Val	Asp	Val	Ser	Tyr	Ala	Thr	Ser	Val	Val	Pro	Gln	
65																80
Leu	Leu	Ala	His	Phe	Leu	Ala	Glu	His	Lys	Ala	Ile	Pro	Phe	Gln	Ser	
																85
																90
																95
Cys	Ala	Ala	Gln	Leu	Phe	Phe	Ser	Leu	Ala	Leu	Gly	Gly	Ile	Glu	Phe	
																100
																105
																110
Val	Leu	Leu	Ala	Val	Met	Ala	Tyr	Asp	Arg	Tyr	Val	Ala	Val	Cys	Asp	
																115
																120
																125
Ala	Leu	Arg	Tyr	Ser	Ala	Ile	Met	His	Gly	Gly	Leu	Cys	Ala	Arg	Leu	
																130
																135
																140
Ala	Ile	Thr	Ser	Trp	Val	Ser	Gly	Phe	Ile	Ser	Ser	Pro	Val	Gln	Thr	
																145
																150
																155
																160
Ala	Ile	Thr	Phe	Gln	Leu	Pro	Met	Cys	Arg	Asn	Lys	Phe	Ile	Asp	His	
																165
																170
																175
Ile	Ser	Cys	Glu	Leu	Leu	Ala	Val	Val	Arg	Leu	Ala	Cys	Val	Asp	Thr	
																180
																185
																190
Ser	Ser	Asn	Glu	Val	Thr	Ile	Met	Val	Ser	Ser	Ile	Val	Leu	Leu	Met	
																195
																200
																205
Thr	Pro	Leu	Cys	Leu	Val	Leu	Leu	Ser	Tyr	Ile	Gln	Ile	Ile	Ser	Thr	
																210
																215
																220
Ile	Leu	Lys	Ile	Gln	Ser	Arg	Glu	Gly	Arg	Lys	Lys	Ala	Phe	His	Thr	
																225
																230
																235
																240
Cys	Ala	Ser	His	Leu	Thr	Val	Val	Ala	Leu	Cys	Tyr	Gly	Val	Ala	Ile	
																245
																250
																255
Phe	Thr	Tyr	Ile	Gln	Pro	His	Ser	Ser	Pro	Ser	Val	Leu	Gln	Glu	Lys	
																260
																265
																270
Leu	Phe	Ser	Val	Phe	Tyr	Ala	Ile	Leu	Thr	Pro	Met	Leu	Asn	Pro	Met	
																275
																280
																285
Ile	Tyr	Ser	Leu	Arg	Asn	Lys	Glu	Val	Lys	Gly	Ala	Trp	Gln	Lys	Leu	
																290
																295
																300

Leu Trp Lys Phe Ser Gly Leu
305 310

<210> 77
<211> 193
<212> PRT
<213> Homo sapiens

<400> 77
Gly Asn Thr Val Leu Leu Phe Leu Ile Arg Val Asp Ser Arg Leu His
1 5 10 15

Thr Pro Met Tyr Phe Leu Leu Ser Gln Leu Ser Leu Phe Asp Ile Gly
20 25 30

Cys Pro Met Val Thr Ile Pro Lys Met Ala Ser Asp Phe Leu Arg Gly
35 40 45

Glu Gly Ala Thr Ser Tyr Gly Gly Ala Ala Gln Ile Phe Phe Leu
50 55 60

Thr Leu Met Gly Val Ala Glu Gly Val Leu Leu Val Leu Met Ser Tyr
65 70 75 80

Asp Arg Tyr Val Ala Val Cys Gln Pro Leu Gln Tyr Pro Val Leu Met
85 90 95

Arg Arg Gln Val Cys Leu Leu Met Met Gly Ser Ser Trp Val Val Gly
100 105 110

Val Leu Asn Ala Ser Ile Gln Thr Ser Ile Thr Leu His Phe Pro Tyr
115 120 125

Cys Ala Ser Arg Ile Val Asp His Phe Phe Cys Glu Val Pro Ala Leu
130 135 140

Leu Lys Leu Ser Cys Ala Asp Thr Cys Ala Tyr Glu Met Ala Leu Ser
145 150 155 160

Thr Ser Gly Val Leu Ile Leu Met Leu Pro Leu Ser Leu Ile Ala Thr
165 170 175

Ser Tyr Gly His Val Leu Gln Ala Val Leu Ser Met Arg Ser Glu Glu
180 185 190

Ala

<210> 78
<211> 174
<212> PRT
<213> Homo sapiens

<400> 78
Gly Asn Val Leu Val Cys Met Ala Val Ser Arg Glu Lys Ala Leu Gln
1 5 10 15

Thr Thr Thr Asn Tyr Leu Ile Val Ser Leu Ala Val Ala Asp Leu Leu
20 25 30

Val Ala Thr Leu Val Met Pro Trp Val Val Tyr Leu Glu Val Val Gly
35 40 45

Glu Trp Lys Phe Ser Arg Ile His Cys Asp Ile Phe Val Thr Leu Asp
50 55 60

Val Met Met Cys Thr Ala Ser Ile Leu Asn Leu Cys Ala Ile Ser Ile
65 70 75 80

Asp Arg Tyr Thr Ala Val Ala Met Pro Met Leu Tyr Asn Thr Arg Tyr
85 90 95

Ser Ser Lys Arg Arg Val Thr Val Met Ile Ala Ile Val Trp Val Leu
100 105 110

Ser Phe Thr Ile Ser Cys Pro Met Leu Phe Gly Leu Asn Asn Thr Asp
115 120 125

Gln Asn Glu Cys Ile Ile Ala Asn Pro Ala Phe Val Val Tyr Ser Ser
130 135 140

Ile Val Ser Phe Tyr Val Pro Phe Ile Val Thr Leu Leu Val Tyr Ile
145 150 155 160

Lys Ile Tyr Ile Val Leu Arg Arg Arg Arg Lys Arg Val Asn
165 170

<210> 79
<211> 305
<212> PRT
<213> Homo sapiens

<400> 79

Met Gly Asp Val Asn Gln Ser Val Ala Ser Asp Phe Ile Leu Val Gly
1 5 10 15

Leu Phe Ser His Ser Gly Ser Arg Gln Leu Leu Phe Ser Leu Val Ala
20 25 30

Val Met Phe Val Ile Gly Leu Leu Gly Asn Thr Val Leu Leu Phe Leu
35 40 45

Ile Arg Val Asp Ser Arg Leu His Thr Pro Met Tyr Phe Leu Leu Ser
50 55 60

Gln Leu Ser Leu Phe Asp Ile Gly Cys Pro Met Val Thr Ile Pro Lys
65 70 75 80

Met Ala Ser Asp Phe Leu Arg Gly Glu Gly Ala Thr Ser Tyr Gly Gly
85 90 95

Gly Ala Ala Gln Ile Phe Phe Leu Thr Leu Met Gly Val Ala Glu Gly
100 105 110

Val Leu Leu Val Leu Met Ser Tyr Asp Arg Tyr Val Ala Val Cys Gln
115 120 125

Pro Leu Gln Tyr Pro Val Leu Met Arg Arg Gln Val Cys Leu Leu Met
130 135 140

Met Gly Ser Ser Trp Val Val Gly Val Leu Asn Ala Ser Ile Gln Thr
145 150 155 160

Ser Ile Thr Leu His Phe Pro Tyr Cys Ala Ser Arg Ile Val Asp His
165 170 175

Phe Phe Cys Glu Val Pro Ala Leu Leu Lys Leu Ser Cys Ala Asp Thr
180 185 190

Cys Ala Tyr Glu Met Ala Leu Ser Thr Ser Gly Val Leu Ile Leu Met
195 200 205

Leu Pro Leu Ser Leu Ile Ala Thr Ser Tyr Gly His Val Leu Gln Ala
210 215 220

Val Leu Ser Met Arg Ser Glu Glu Ala Arg His Lys Ala Val Thr Thr
225 230 235 240

Cys Ser Ser His Ile Thr Val Val Gly Leu Phe Tyr Gly Ala Ala Val
245 250 255

Phe Met Tyr Met Val Pro Cys Ala Tyr His Ser Pro Gln Gln Asp Asn
260 265 270

Val Val Ser Leu Phe Tyr Ser Leu Val Thr Pro Thr Leu Asn Pro Leu
275 280 285

Ile Tyr Ser Leu Arg Asn Pro Glu Val Trp Met Ala Leu Val Lys Val
290 295 300

Leu
305

<210> 80
<211> 305
<212> PRT
<213> Homo sapiens

<400> 80
Met Gly Thr Asp Asn Gln Thr Trp Val Ser Glu Phe Ile Leu Leu Gly
1 5 10 15

Leu Ser Ser Asp Trp Asp Thr Arg Val Ser Leu Phe Val Leu Phe Leu
20 25 30

Val Met Tyr Val Val Thr Val Leu Gly Asn Cys Leu Ile Val Leu Leu
35 40 45

Ile Arg Leu Asp Ser Arg Leu His Thr Pro Met Tyr Phe Phe Leu Thr
50 55 60

Asn Leu Ser Leu Val Asp Val Ser Tyr Ala Thr Ser Val Val Pro Gln
65 70 75 80

Leu Leu Ala His Phe Leu Ala Glu His Lys Ala Ile Pro Phe Gln Ser
85 90 95

Cys Ala Ala Gln Leu Phe Phe Ser Leu Ala Leu Gly Gly Ile Glu Phe
100 105 110

Val Leu Leu Ala Val Met Ala Tyr Asp Arg Tyr Val Ala Val Cys Asp
115 120 125

Ala Leu Arg Tyr Ser Ala Ile Met His Gly Gly Leu Cys Ala Arg Leu
130 135 140

Ala Ile Thr Ser Trp Val Ser Gly Phe Ile Ser Ser Pro Val Gln Thr
145 150 155 160

Ala Ile Thr Phe Gln Leu Pro Met Cys Arg Asn Lys Phe Ile Asp His
165 170 175

Ile Ser Cys Glu Leu Leu Ala Val Val Arg Leu Ala Cys Val Asp Thr
180 185 190

Ser Ser Asn Glu Val Thr Ile Met Val Ser Ser Ile Val Leu Leu Met
195 200 205

Thr Pro Leu Cys Leu Val Leu Ser Tyr Ile Gln Ile Ile Ser Thr
210 215 220

Ile Leu Lys Ile Gln Ser Arg Glu Gly Arg Lys Lys Ala Phe His Thr
225 230 235 240

Cys Ala Ser His Leu Thr Val Val Ala Leu Cys Tyr Gly Val Ala Ile
245 250 255

Phe Thr Tyr Ile Gln Pro His Ser Ser Pro Ser Val Leu Gln Glu Lys
260 265 270

Leu Phe Ser Val Phe Tyr Ala Ile Leu Thr Pro Met Leu Asn Pro Met
275 280 285

Ile Tyr Ser Leu Arg Asn Lys Glu Val Lys Gly Ala Trp Gln Lys Leu
290 295 300

Leu

305

<210> 81

<211> 183

<212> PRT

<213> Homo sapiens

<400> 81

Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His Leu Ala Val Val
1 5 10 15

Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met Leu Val Asn Leu
20 25 30

Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg Met Met Gln Thr
35 40 45

Phe Leu Phe Ser Thr Phe Ala Val Thr Glu Cys Leu Leu Val Val

50	55	60	
Met Ser Tyr Asp Leu Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Leu			
65	70	75	80
Ala Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala Val Thr Ser Trp			
85	90		95
Thr Thr Gly Val Leu Leu Ser Leu Ile His Leu Val Leu Leu Pro			
100	105	110	
Leu Pro Phe Cys Arg Pro Gln Lys Ile Tyr His Phe Phe Cys Glu Ile			
115	120	125	
Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr His Ile Asn Glu Asn			
130	135	140	
Met Val Leu Ala Gly Ala Ile Ser Gly Leu Val Gly Pro Leu Ser Thr			
145	150	155	160
Ile Val Val Ser Tyr Met Cys Ile Leu Cys Ala Ile Leu Gln Ile Gln			
165	170	175	
Ser Arg Glu Val Gln Arg Lys			
180			

<210> 82
 <211> 164
 <212> PRT
 <213> Homo sapiens

<400> 82			
Ala Leu Gln Thr Thr Asn Tyr Leu Ile Val Ser Leu Ala Val Ala			
1	5	10	15
Asp Leu Leu Val Ala Thr Leu Val Met Pro Trp Val Val Tyr Leu Glu			
20	25	30	
Val Val Gly Glu Trp Lys Phe Ser Arg Ile His Cys Asp Ile Phe Val			
35	40	45	
Thr Leu Asp Val Met Met Cys Thr Ala Ser Ile Leu Asn Leu Cys Ala			
50	55	60	
Ile Ser Ile Asp Arg Tyr Thr Ala Val Ala Met Pro Met Leu Tyr Asn			
65	70	75	80

Thr Arg Tyr Ser Ser Lys Arg Arg Val Thr Val Met Ile Ala Ile Val
85 90 95

Trp Val Leu Ser Phe Thr Ile Ser Cys Pro Met Leu Phe Gly Leu Asn
100 105 110

Asn Thr Asp Gln Asn Glu Cys Ile Ile Ala Asn Pro Ala Phe Val Val
115 120 125

Tyr Ser Ser Ile Val Ser Phe Tyr Val Pro Phe Ile Val Thr Leu Leu
130 135 140

Val Tyr Ile Lys Ile Tyr Ile Val Leu Arg Arg Arg Arg Lys Arg Val
145 150 155 160

Asn Thr Lys Arg

<210> 83

<211> 193

<212> PRT

<213> Homo sapiens

<400> 83

Gly Asn Thr Val Leu Leu Phe Leu Ile Arg Val Asp Ser Arg Leu His
1 5 10 15

Thr Pro Met Tyr Phe Leu Leu Ser Gln Leu Ser Leu Phe Asp Ile Gly
20 25 30

Cys Pro Met Val Thr Ile Pro Lys Met Ala Ser Asp Phe Leu Arg Gly
35 40 45

Glu Gly Ala Thr Ser Tyr Gly Gly Gly Ala Ala Gln Ile Phe Phe Leu
50 55 60

Thr Leu Met Gly Val Ala Glu Gly Val Leu Leu Val Leu Met Ser Tyr
65 70 75 80

Asp Arg Tyr Val Ala Val Cys Gln Pro Leu Gln Tyr Pro Val Leu Met
85 90 95

Arg Arg Gln Val Cys Leu Leu Met Met Gly Ser Ser Trp Val Val Gly
100 105 110

Val Leu Asn Ala Ser Ile Gln Thr Ser Ile Thr Leu His Phe Pro Tyr
115 120 125

Cys Ala Ser Arg Ile Val Asp His Phe Phe Cys Glu Val Pro Ala Leu
130 135 140

Leu Lys Leu Ser Cys Ala Asp Thr Cys Ala Tyr Glu Met Ala Leu Ser
145 150 155 160

Thr Ser Gly Val Leu Ile Leu Met Leu Pro Leu Ser Leu Ile Ala Thr
165 170 175

Ser Tyr Gly His Val Leu Gln Ala Val Leu Ser Met Arg Ser Glu Glu
180 185 190

Ala

<210> 84

<211> 174

<212> PRT

<213> Homo sapiens

<400> 84

Gly Asn Val Leu Val Cys Met Ala Val Ser Arg Glu Lys Ala Leu Gln
1 5 10 15

Thr Thr Thr Asn Tyr Leu Ile Val Ser Leu Ala Val Ala Asp Leu Leu
20 25 30

Val Ala Thr Leu Val Met Pro Trp Val Val Tyr Leu Glu Val Val Gly
35 40 45

Glu Trp Lys Phe Ser Arg Ile His Cys Asp Ile Phe Val Thr Leu Asp
50 55 60

Val Met Met Cys Thr Ala Ser Ile Leu Asn Leu Cys Ala Ile Ser Ile
65 70 75 80

Asp Arg Tyr Thr Ala Val Ala Met Pro Met Leu Tyr Asn Thr Arg Tyr
85 90 95

Ser Ser Lys Arg Arg Val Thr Val Met Ile Ala Ile Val Trp Val Leu
100 105 110

Ser Phe Thr Ile Ser Cys Pro Met Leu Phe Gly Leu Asn Asn Thr Asp
115 120 125

Gln Asn Glu Cys Ile Ile Ala Asn Pro Ala Phe Val Val Tyr Ser Ser

130	135	140	
Ile Val Ser Phe Tyr Val Pro Phe Ile Val Thr Leu Leu Val Tyr Ile			
145	150	155	160
Lys Ile Tyr Ile Val Leu Arg Arg Arg Arg Lys Arg Val Asn			
165	170		
<210> 85			
<211> 305			
<212> PRT			
<213> Homo sapiens			
<400> 85			
Met Asn Pro Ala Asn His Ser Gln Val Ala Gly Phe Val Leu Leu Gly			
1	5	10	15
Leu Ser Gln Val Trp Glu Leu Arg Phe Val Phe Phe Thr Val Phe Ser			
20	25	30	
Ala Val Tyr Phe Met Thr Val Val Gly Asn Leu Leu Ile Val Val Ile			
35	40	45	
Val Thr Ser Asp Pro His Leu His Thr Thr Met Tyr Phe Leu Leu Gly			
50	55	60	
Asn Leu Ser Phe Leu Asp Phe Cys Tyr Ser Ser Ile Thr Ala Pro Arg			
65	70	75	80
Met Leu Val Asp Leu Leu Ser Gly Asn Pro Thr Ile Ser Phe Gly Gly			
85	90	95	
Cys Leu Thr Gln Leu Phe Phe His Phe Ile Gly Gly Ile Lys Ile			
100	105	110	
Phe Leu Leu Thr Val Met Ala Tyr Asp Arg Tyr Ile Ala Ile Ser Gln			
115	120	125	
Pro Leu His Tyr Thr Leu Ile Met Asn Gln Thr Val Cys Ala Leu Leu			
130	135	140	
Met Ala Ala Ser Trp Val Gly Gly Phe Ile His Ser Ile Val Gln Ile			
145	150	155	160
Ala Leu Thr Ile Gln Leu Pro Phe Cys Gly Pro Asp Lys Leu Asp Asn			
165	170	175	

Phe Tyr Cys Asp Val Pro Gln Leu Ile Lys Leu Ala Cys Thr Asp Thr
180 185 190

Phe Val Leu Glu Leu Leu Met Val Ser Asn Asn Gly Leu Val Thr Leu
195 200 205

Met Cys Phe Leu Val Leu Leu Gly Ser Tyr Thr Ala Leu Leu Val Met
210 215 220

Leu Arg Ser His Ser Arg Glu Gly Arg Ser Lys Ala Leu Ser Thr Cys
225 230 235 240

Ala Ser His Ile Ala Val Val Thr Leu Ile Phe Val Pro Cys Ile Tyr
245 250 255

Val Tyr Thr Arg Pro Phe Arg Thr Phe Pro Met Asp Lys Ala Val Ser
260 265 270

Val Leu Tyr Thr Ile Val Thr Pro Met Leu Asn Pro Ala Ile Tyr Thr
275 280 285

Leu Arg Asn Lys Glu Val Ile Met Ala Met Lys Lys Leu Trp Arg Arg
290 295 300

Lys
305

<210> 86

<211> 305

<212> PRT

<213> Homo sapiens

<400> 86
Met Gly Ala Leu Asn Gln Thr Arg Val Thr Glu Phe Ile Phe Leu Gly
1 5 10 15

Leu Thr Asp Asn Trp Val Leu Glu Ile Leu Phe Phe Val Pro Phe Thr
20 25 30

Val Thr Tyr Met Leu Thr Leu Leu Gly Asn Phe Leu Ile Val Val Thr
35 40 45

Ile Val Phe Thr Pro Arg Leu His Asn Pro Met Tyr Phe Phe Leu Ser
50 55 60

Asn Leu Ser Phe Ile Asp Ile Cys His Ser Ser Val Thr Val Pro Lys
65 70 75 80

Met	Leu	Glu	Gly	Leu	Leu	Leu	Glu	Arg	Lys	Thr	Ile	Ser	Phe	Asp	Asn
															95
Cys	Ile	Ala	Gln	Leu	Phe	Phe	Leu	His	Leu	Phe	Ala	Cys	Ser	Glu	Ile
															110
Phe	Leu	Leu	Thr	Ile	Met	Ala	Tyr	Asp	Arg	Tyr	Val	Ala	Ile	Cys	Ile
															125
Pro	Leu	His	Tyr	Ser	Asn	Val	Met	Asn	Met	Lys	Val	Cys	Val	Gln	Leu
															140
Val	Phe	Ala	Leu	Trp	Leu	Gly	Gly	Thr	Ile	His	Ser	Leu	Val	Gln	Thr
															160
Phe	Leu	Thr	Ile	Arg	Leu	Pro	Tyr	Cys	Gly	Pro	Asn	Ile	Ile	Asp	Ser
															175
Tyr	Phe	Cys	Asp	Val	Pro	Pro	Val	Ile	Lys	Leu	Ala	Cys	Thr	Asp	Thr
															190
Tyr	Leu	Thr	Gly	Ile	Leu	Ile	Val	Ser	Asn	Ser	Gly	Thr	Ile	Ser	Leu
															205
Val	Cys	Phe	Leu	Ala	Leu	Val	Thr	Ser	Tyr	Thr	Val	Ile	Leu	Phe	Ser
															220
Leu	Arg	Lys	Lys	Ser	Ala	Glu	Gly	Arg	Arg	Lys	Ala	Leu	Ser	Thr	Cys
															240
Ser	Ala	His	Phe	Met	Val	Val	Thr	Leu	Phe	Phe	Gly	Pro	Cys	Ile	Phe
															255
Leu	Tyr	Thr	Arg	Pro	Asp	Ser	Ser	Phe	Ser	Ile	Asp	Lys	Val	Val	Ser
															270
Val	Phe	Tyr	Thr	Val	Val	Thr	Pro	Leu	Leu	Asn	Pro	Leu	Ile	Tyr	Thr
															285
Leu	Arg	Asn	Glu	Glu	Val	Lys	Thr	Ala	Met	Lys	His	Leu	Arg	Gln	Arg
															300
Arg															
305															

<211> 196

<212> PRT

<213> Homo sapiens

<400> 87

Gly Asn Leu Leu Ile Val Val Ile Val Thr Ser Asp Pro His Leu His
1 5 10 15

Thr Thr Met Tyr Phe Leu Leu Gly Asn Leu Ser Phe Leu Asp Phe Cys
20 25 30

Tyr Ser Ser Ile Thr Ala Pro Arg Met Leu Val Asp Leu Leu Ser Gly
35 40 45

Asn Pro Thr Ile Ser Phe Gly Gly Cys Leu Thr Gln Leu Phe Phe Phe
50 55 60

His Phe Ile Gly Gly Ile Lys Ile Phe Leu Leu Thr Val Met Ala Tyr
65 70 75 80

Asp Arg Tyr Ile Ala Ile Ser Gln Pro Leu His Tyr Thr Leu Ile Met
85 90 95

Asn Gln Thr Val Cys Ala Leu Leu Met Ala Ala Ser Trp Val Gly Gly
100 105 110

Phe Ile His Ser Ile Val Gln Ile Ala Leu Thr Ile Gln Leu Pro Phe
115 120 125

Cys Gly Pro Asp Lys Leu Asp Asn Phe Tyr Cys Asp Val Pro Gln Leu
130 135 140

Ile Lys Leu Ala Cys Thr Asp Thr Phe Val Leu Glu Leu Leu Met Val
145 150 155 160

Ser Asn Asn Gly Leu Val Thr Leu Met Cys Phe Leu Val Leu Leu Gly
165 170 175

Ser Tyr Thr Ala Leu Leu Val Met Leu Arg Ser His Ser Arg Glu Gly
180 185 190

Arg Ser Lys Ala

195

<210> 88

<211> 177

<212> PRT

<213> Homo sapiens

<400> 88
Gly Asn Val Leu Val Cys Met Ala Val Ser Arg Glu Lys Ala Leu Gln
1 5 10 15
Thr Thr Thr Asn Tyr Leu Ile Val Ser Leu Ala Val Ala Asp Leu Leu
20 25 30
Val Ala Thr Leu Val Met Pro Trp Val Val Tyr Leu Glu Val Val Gly
35 40 45
Glu Trp Lys Phe Ser Arg Ile His Cys Asp Ile Phe Val Thr Leu Asp
50 55 60
Val Met Met Cys Thr Ala Ser Ile Leu Asn Leu Cys Ala Ile Ser Ile
65 70 75 80
Asp Arg Tyr Thr Ala Val Ala Met Pro Met Leu Tyr Asn Thr Arg Tyr
85 90 95
Ser Ser Lys Arg Arg Val Thr Val Met Ile Ala Ile Val Trp Val Leu
100 105 110
Ser Phe Thr Ile Ser Cys Pro Met Leu Phe Gly Leu Asn Asn Thr Asp
115 120 125
Gln Asn Glu Cys Ile Ile Ala Asn Pro Ala Phe Val Val Tyr Ser Ser
130 135 140
Ile Val Ser Phe Tyr Val Pro Phe Ile Val Thr Leu Leu Val Tyr Ile
145 150 155 160
Lys Ile Tyr Ile Val Leu Arg Arg Arg Arg Lys Arg Val Asn Thr Lys
165 170 175
Arg

<210> 89

<211> 310

<212> PRT

<213> Homo sapiens

<400> 89

Met Gly Asp Asn Ile Thr Ser Ile Arg Glu Phe Leu Leu Leu Gly Phe
1 5 10 15

Pro Val Gly Pro Arg Ile Gln Met Leu Leu Phe Gly Leu Phe Ser Leu
20 25 30

Phe Tyr Val Phe Thr Leu Leu Gly Asn Gly Thr Ile Leu Gly Leu Ile
35 40 45

Ser Leu Asp Ser Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His
50 55 60

Leu Ala Val Val Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met
65 70 75 80

Leu Val Asn Leu Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg
85 90 95

Met Met Gln Thr Phe Leu Phe Ser Thr Phe Ala Val Thr Glu Cys Leu
100 105 110

Leu Leu Val Val Met Ser Tyr Asp Leu Tyr Val Ala Ile Cys His Pro
115 120 125

Leu Arg Tyr Leu Ala Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala
130 135 140

Val Thr Ser Trp Thr Thr Gly Val Leu Leu Ser Leu Ile His Leu Val
145 150 155 160

Leu Leu Leu Pro Leu Pro Phe Cys Arg Pro Gln Lys Ile Tyr His Phe
165 170 175

Phe Cys Glu Ile Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr His
180 185 190

Ile Asn Glu Asn Met Val Leu Ala Gly Ala Ile Ser Gly Leu Val Gly
195 200 205

Pro Leu Ser Thr Ile Val Val Ser Tyr Met Cys Ile Leu Cys Ala Ile
210 215 220

Leu Gln Ile Gln Ser Arg Glu Val Gln Arg Lys Ala Phe Arg Thr Cys
225 230 235 240

Phe Ser His Leu Cys Val Ile Gly Leu Val Tyr Gly Thr Ala Ile Ile
245 250 255

Met Tyr Val Gly Pro Arg Tyr Gly Asn Pro Lys Glu Gln Lys Lys Tyr
260 265 270

Leu Leu Leu Phe His Ser Leu Phe Asn Pro Met Leu Asn Pro Leu Ile
275 280 285

Cys Ser Leu Arg Asn Ser Glu Val Lys Asn Thr Leu Lys Arg Val Leu
290 295 300

Gly Val Glu Arg Ala Leu
305 310

<210> 90
<211> 183
<212> PRT
<213> Homo sapiens

<400> 90
Arg Leu His Ala Pro Met Tyr Phe Phe Leu Ser His Leu Ala Val Val
1 5 10 15

Asp Ile Ala Tyr Ala Cys Asn Thr Val Pro Arg Met Leu Val Asn Leu
20 25 30

Leu His Pro Ala Lys Pro Ile Ser Phe Ala Gly Arg Met Met Gln Thr
35 40 45

Phe Leu Phe Ser Thr Phe Ala Val Thr Glu Cys Leu Leu Val Val
50 55 60

Met Ser Tyr Asp Leu Tyr Val Ala Ile Cys His Pro Leu Arg Tyr Leu
65 70 75 80

Ala Ile Met Thr Trp Arg Val Cys Ile Thr Leu Ala Val Thr Ser Trp
85 90 95

Thr Thr Gly Val Leu Leu Ser Leu Ile His Leu Val Leu Leu Pro
100 105 110

Leu Pro Phe Cys Arg Pro Gln Lys Ile Tyr His Phe Phe Cys Glu Ile
115 120 125

Leu Ala Val Leu Lys Leu Ala Cys Ala Asp Thr His Ile Asn Glu Asn
130 135 140

Met Val Leu Ala Gly Ala Ile Ser Gly Leu Val Gly Pro Leu Ser Thr
145 150 155 160

Ile Val Val Ser Tyr Met Cys Ile Leu Cys Ala Ile Leu Gln Ile Gln

165	170	175
Ser Arg Glu Val Gln Arg Lys		
180		
<210> 91		
<211> 164		
<212> PRT		
<213> Homo sapiens		
<400> 91		
Ala Leu Gln Thr Thr Asn Tyr Leu Ile Val Ser Leu Ala Val Ala		
1	5	10
15		
Asp Leu Leu Val Ala Thr Leu Val Met Pro Trp Val Val Tyr Leu Glu		
20	25	30
Val Val Gly Glu Trp Lys Phe Ser Arg Ile His Cys Asp Ile Phe Val		
35	40	45
Thr Leu Asp Val Met Met Cys Thr Ala Ser Ile Leu Asn Leu Cys Ala		
50	55	60
Ile Ser Ile Asp Arg Tyr Thr Ala Val Ala Met Pro Met Leu Tyr Asn		
65	70	75
80		
Thr Arg Tyr Ser Ser Lys Arg Arg Val Thr Val Met Ile Ala Ile Val		
85	90	95
Trp Val Leu Ser Phe Thr Ile Ser Cys Pro Met Leu Phe Gly Leu Asn		
100	105	110
Asn Thr Asp Gln Asn Glu Cys Ile Ile Ala Asn Pro Ala Phe Val Val		
115	120	125
Tyr Ser Ser Ile Val Ser Phe Tyr Val Pro Phe Ile Val Thr Leu Leu		
130	135	140
Val Tyr Ile Lys Ile Tyr Ile Val Leu Arg Arg Arg Arg Lys Arg Val		
145	150	155
160		
Asn Thr Lys Arg		

<210> 92
 <211> 263

<212> PRT

<213> Homo sapiens

<400> 92

Met Tyr Phe Phe Leu Ser Asn Leu Ser Leu Ala Asp Ile Gly Phe Thr
1 5 10 15

Ser Thr Thr Val Pro Lys Met Ile Val Asp Met Gln Thr His Ser Arg
20 25 30

Val Ile Ser Tyr Glu Gly Cys Leu Thr Gln Met Ser Phe Phe Val Leu
35 40 45

Phe Ala Cys Met Asp Asp Met Leu Leu Ser Val Met Ala Tyr Asp Arg
50 55 60

Phe Val Ala Ile Cys His Pro Leu His Tyr Arg Ile Ile Met Asn Pro
65 70 75 80

Arg Leu Cys Gly Phe Leu Ile Leu Ser Phe Phe Ile Ser Leu Leu
85 90 95

Asp Ser Gln Leu His Asn Leu Ile Met Leu Gln Leu Thr Cys Phe Lys
100 105 110

Asp Val Asp Ile Ser Asn Phe Phe Cys Asp Pro Ser Gln Leu Leu His
115 120 125

Leu Arg Cys Ser Asp Thr Phe Ile Asn Glu Met Val Ile Tyr Phe Met
130 135 140

Gly Ala Ile Phe Gly Cys Leu Pro Ile Ser Gly Ile Leu Phe Ser Tyr
145 150 155 160

Tyr Lys Ile Val Ser Pro Ile Leu Arg Val Pro Thr Ser Asp Gly Lys
165 170 175

Tyr Lys Ala Phe Ser Thr Cys Gly Ser His Leu Ala Val Val Cys Leu
180 185 190

Phe Tyr Gly Thr Gly Leu Val Gly Tyr Leu Ser Ser Ala Val Leu Pro
195 200 205

Ser Pro Arg Lys Ser Met Val Ala Ser Val Met Tyr Thr Val Val Thr
210 215 220

Pro Met Leu Asn Pro Phe Ile Tyr Ser Leu Arg Asn Lys Asp Ile Gln
225 230 235 240

Ser Ala Leu Cys Arg Leu His Gly Arg Ile Ile Lys Ser His His Leu
245 250 255

His Pro Phe Cys Tyr Met Gly
260

<210> 93

<211> 173

<212> PRT

<213> Homo sapiens

<400> 93

Met Tyr Phe Phe Leu Ser Asn Leu Cys Trp Ala Asp Ile Gly Phe Thr
1 5 10 15

Leu Ala Thr Val Pro Lys Met Ile Val Asp Met Gly Ser His Ser Arg
20 25 30

Val Ile Ser Tyr Glu Gly Cys Leu Thr Gln Met Ser Phe Phe Val Leu
35 40 45

Phe Ala Cys Ile Glu Asp Met Leu Leu Thr Val Met Ala Tyr Asp Gln
50 55 60

Phe Val Ala Ile Cys His Pro Leu His Tyr Pro Val Ile Met Asn Pro
65 70 75 80

His Leu Cys Val Phe Leu Val Leu Ser Phe Phe Leu Ser Leu Leu
85 90 95

Asp Ser Gln Leu His Ser Trp Ile Val Leu Gln Phe Thr Phe Phe Lys
100 105 110

Asn Val Glu Ile Ser Asn Phe Phe Cys Asp Pro Ser Gln Leu Leu Asn
115 120 125

Leu Ala Cys Ser Asp Gly Ile Ile Asn Ser Ile Phe Ile Tyr Leu Asp
130 135 140

Ser Ile Leu Phe Ser Phe Leu Pro Ile Ser Gly Ile Leu Leu Ser Tyr
145 150 155 160

Tyr Lys Ile Val Pro Ser Ile Leu Arg Ile Ser Ser Ser
165 170

<210> 94
<211> 154
<212> PRT
<213> Homo sapiens

<400> 94

Thr	Asn	Tyr	Leu	Ile	Val	Ser	Leu	Ala	Val	Ala	Asp	Leu	Leu	Val	Ala
1				5					10						15

Thr Leu Val Met Pro Trp Val Val Tyr Leu Glu Val Val Gly Glu Trp

20					25						30				
----	--	--	--	--	----	--	--	--	--	--	----	--	--	--	--

Lys Phe Ser Arg Ile His Cys Asp Ile Phe Val Thr Leu Asp Val Met

35					40					45					
----	--	--	--	--	----	--	--	--	--	----	--	--	--	--	--

Met Cys Thr Ala Ser Ile Leu Asn Leu Cys Ala Ile Ser Ile Asp Arg

50					55				60						
----	--	--	--	--	----	--	--	--	----	--	--	--	--	--	--

Tyr Thr Ala Val Ala Met Pro Met Leu Tyr Asn Thr Arg Tyr Ser Ser

65					70			75			80				
----	--	--	--	--	----	--	--	----	--	--	----	--	--	--	--

Lys Arg Arg Val Thr Val Met Ile Ala Ile Val Trp Val Leu Ser Phe

85					90				95						
----	--	--	--	--	----	--	--	--	----	--	--	--	--	--	--

Thr Ile Ser Cys Pro Met Leu Phe Gly Leu Asn Asn Thr Asp Gln Asn

100					105				110						
-----	--	--	--	--	-----	--	--	--	-----	--	--	--	--	--	--

Glu Cys Ile Ile Ala Asn Pro Ala Phe Val Val Tyr Ser Ser Ile Val

115					120				125						
-----	--	--	--	--	-----	--	--	--	-----	--	--	--	--	--	--

Ser Phe Tyr Val Pro Phe Ile Val Thr Leu Leu Val Tyr Ile Lys Ile

130					135				140						
-----	--	--	--	--	-----	--	--	--	-----	--	--	--	--	--	--

Tyr Ile Val Leu Arg Arg Arg Lys Arg

145					150										
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Phe Thr Leu Ile Thr Asp Phe Val Phe Gln Gly Phe Ser Ser Phe His

20					25						30				
----	--	--	--	--	----	--	--	--	--	--	----	--	--	--	--

Glu Gln Gln Ile Thr Leu Phe Gly Val Phe Leu Ala Leu Tyr Ile Leu
 35 40 45

Thr Leu Ala Gly Asn Ile Ile Val Thr Ile Ile Arg Ile Asp Leu
 50 55 60

His Leu His Thr Pro Met Tyr Phe Phe Leu Ser Met Leu Ser Thr Ser
 65 70 75 80

Glu Thr Val Tyr Thr Leu Val Ile Leu Pro Arg Met Leu Ser Ser Leu
 85 90 95

Val Gly Met Ser Gln Pro Met Ser Leu Ala Gly Cys Ala Thr Gln Met
 100 105 110

Phe Phe Phe Val Thr Phe Gly Ile Thr Asn Cys Phe Leu Leu Thr Ala
 115 120 125

Met Gly Tyr Asp Arg Tyr Val Ala Ile Cys Asn Pro Leu Arg Tyr Met
 130 135 140

Val Ile Met Asn Lys Arg Leu Arg Ile Gln Leu Val Leu Gly Ala Cys
 145 150 155 160

Ser Ile Gly Leu Ile Val Ala Ile Thr Gln Val Thr Ser Val Phe Arg
 165 170 175

Leu Pro Phe Cys Ala Arg Lys Val Pro His Phe Phe Cys Asp Ile Arg
 180 185 190

Pro Val Met Lys Leu Ser Cys Ile Asp Thr Thr Val Asn Glu Ile Leu
 195 200 205

Thr Leu Ile Ile Ser Val Leu Val Leu Val Val Pro Met Gly Leu Val
 210 215 220

Phe Ile Ser Tyr Val Leu Ile Ile Ser Thr Ile Leu Lys Ile Ala Ser
 225 230 235 240

Val Glu Gly Arg Lys Lys Ala Phe Ala Thr Cys Ala Ser His Leu Thr
 245 250 255

Val Val Ile Val His Tyr Ser Cys Ala Ser Ile Ala Tyr Leu Lys Pro
 260 265 270

Lys Ser Glu Asn Thr Arg Glu His Asp Gln Leu Ile Ser Val Thr Tyr
 275 280 285

Thr Val Ile Thr Pro Leu Leu Asn Pro Val Val Tyr Thr Leu Arg Asn
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Lys Glu Val Lys Asp Ala Leu Cys Arg Ala Val Gly Gly Lys Phe Ser
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primer

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primer

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